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SECTION 1.0 INTRODUCTION AND PURPOSE

This Initial Study (IS) of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the City of Santa Clara. The purpose of this document is to provide objective information regarding the environmental consequences of the proposed project to the decision makers who will be reviewing and considering the project.

This IS evaluates the potential environmental impacts which might reasonably be anticipated to result from demolition of a three-story office building at 100 Winchester Boulevard and the construction of a four-story, 92-unit apartment building on a 1.86-acre site in the City of Santa Clara.

All documents referenced in this IS are available for public review in the Department of Planning and Inspection at Santa Clara City Hall, 1500 Warburton Avenue, during normal business hours.

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Santana Terrace Senior Apartments

2.2 PROJECT LOCATION

The project site is located at 100 Winchester Boulevard just south of Pruneridge Avenue/West Hedding Street in the City of Santa Clara.

Regional, vicinity, and aerial photograph maps of the project site are shown on Figures 2.1-1, 2.2-2, and 2.2-3, respectively.

2.3 LEAD AGENCY CONTACT

City of Santa Clara Yen Chen, Associate Planner Planning and Inspection Department 1500 Warburton Avenue Santa Clara, CA 95050 Phone: (408) 615-2450

2.4 ASSESSOR'S PARCEL NUMBERS

APN 303-16-073

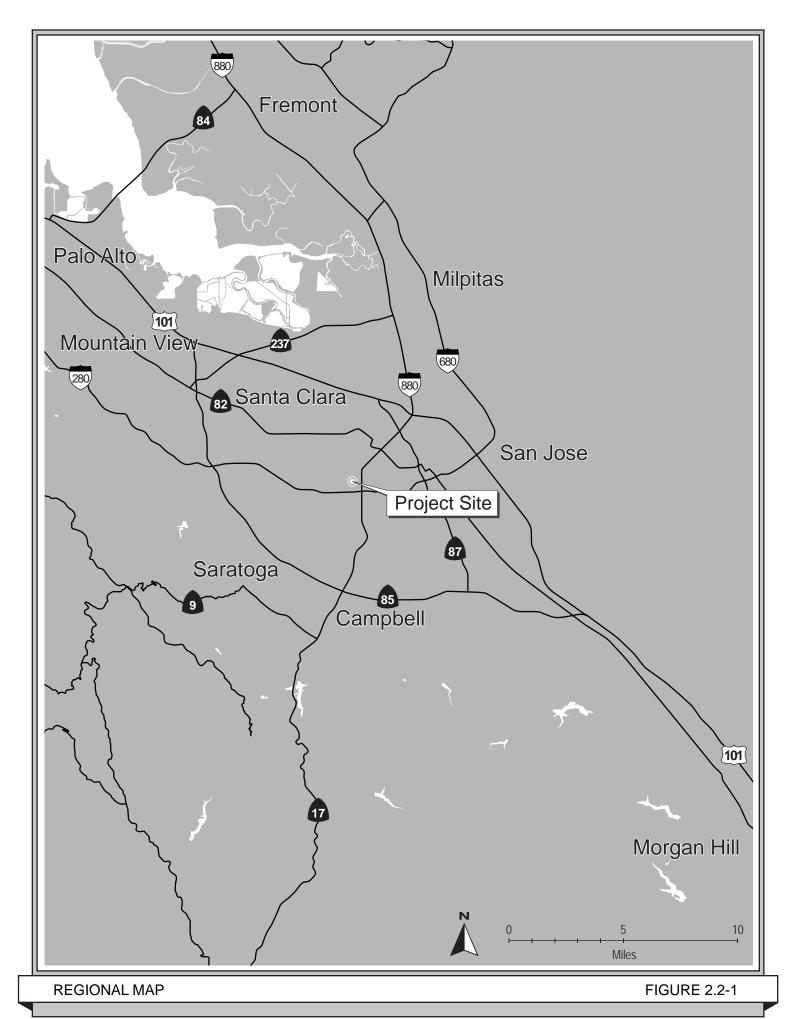
2.5 ZONING DISTRICT AND GENERAL PLAN DESIGNATIONS

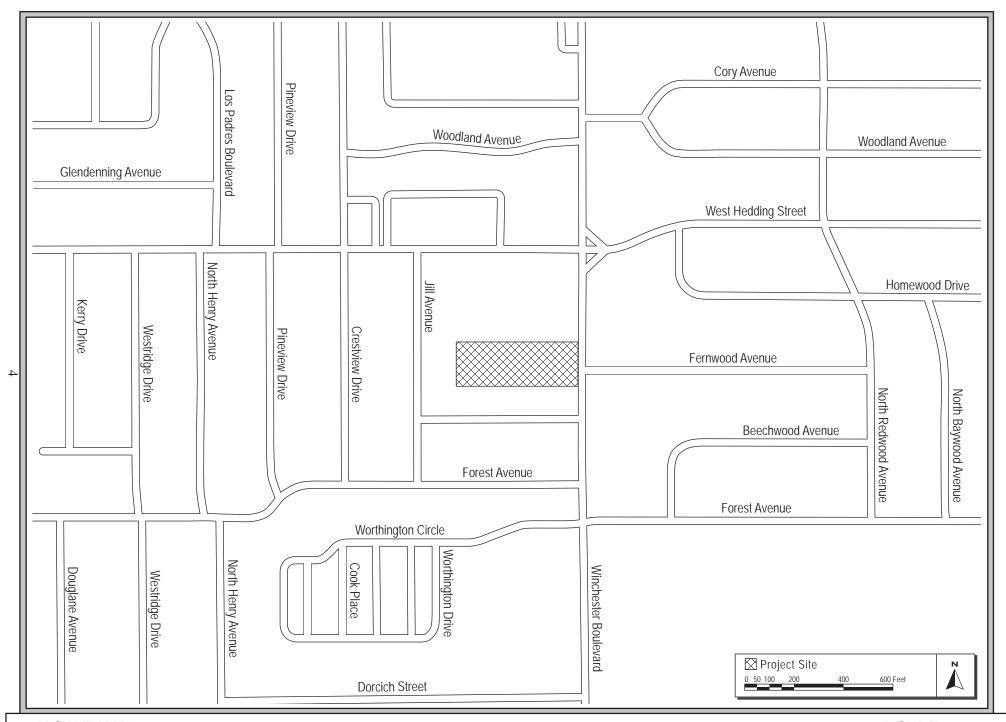
General Plan Designation: Regional Commercial

Zoning District: *OG – General Office*

Proposed General Plan Designation: High Density Residential

Proposed Zoning District: Planned Development





AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

SECTION 3.0 PROJECT DESCRIPTION

The 1.86-acre project site is comprised of a single parcel (APN: 303-16-073) located at 100 Winchester Boulevard, south of Pruneridge Avenue/West Hedding Street, in the City of Santa Clara. The project site is designated *Regional Commercial* in the City's General Plan and zoned *OG – General Office*.

The project site is currently developed with a three-story, 65,000 square foot (sf) office building, surface parking areas along the northern and southern boundaries under the building, and a large surface parking lot on the western portion (the rear) of the property. Landscaping consists of trees, shrubs, and groundcover along the boundaries of the project site and within the atrium of the office building.

The project site is accessible from two ingress/egress driveways on Winchester Boulevard. Two automatic security gates provide access to parking areas at the ground level of the building and at the rear of the property. The site is separated from the adjacent land uses by an eight-foot fence. Pedestrians can access the site via a centrally located 10-foot wide paved walkway from Winchester Boulevard that connects to a 20-foot wide crosswalk on-site near the main entrance of the office building. A 10-foot wide sidewalk is also located along the street frontage of the site.

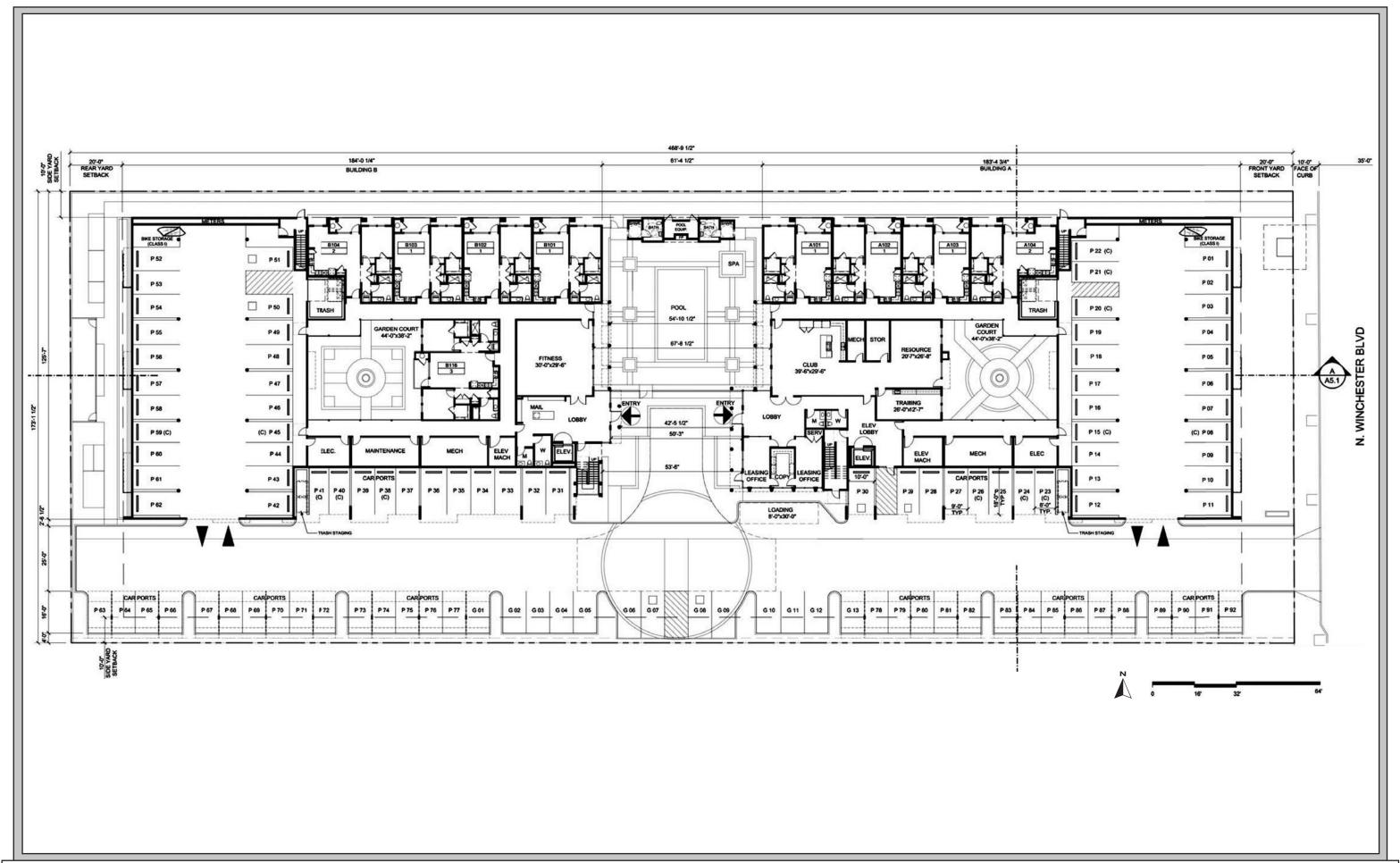
3.1 REDEVELOPMENT AND SITE DESIGN

The project proposes to demolish the existing office building on-site and construct two residential buildings totaling 137,891 sf. The buildings would range from two to four stories and would have up to 92 housing units (50 dwelling units per acre [DU/AC]) and 105 parking spaces. The two buildings, located on the eastern and western halves of the site, would be separated by a pool area and an entry plaza that would provide access to the buildings. The ground level would include living and communal indoor and outdoor spaces and vehicle parking. The remaining upper three floors would be residential units. These units are designed only for senior residents.

The buildings will be four stories in the center of the site, stepping down to three stories along Winchester Boulevard and two stories along the western boundary of the site.

The buildings would have a maximum height of 45 feet to the roofline. The proposed development would have a minimum setback of 20 feet from Winchester Boulevard, 47.6 feet from the southern boundary, 20 feet from the western boundary, and 10 feet from the northern boundary of the project site.

Figures 3.1-1, 3.1-2, 3.1-3, and 3.1-4 show the site plan, elevations, and renderings of the proposed project.



CONCEPTUAL SITE PLAN

FIGURE 3.1-1

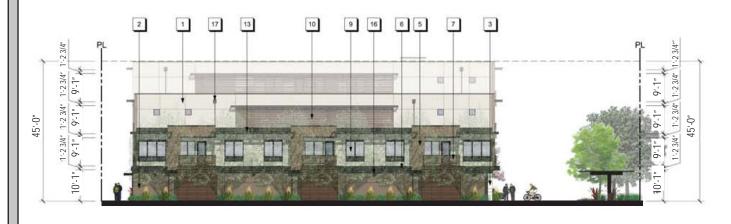






WEST COURTYARD ELEVATION

EAST COURTYARD ELEVATION





WEST ELEVATION

EAST ELEVATION

BUILDING ELEVATIONS FIGURE 3.1-3

9



3.1.1 <u>Access and Parking</u>

Parking would be provided in two garages on the ground floor of the apartment buildings, two carports on the south side of the proposed buildings, and a row of surface parking along the southern boundary of the site, for a total of 105 spaces. The project would remove the existing northern driveway and retain the southern driveway. From the proposed driveway, vehicles would access all parking areas and a passenger drop off area located midway on-site, between the apartment buildings and the surface parking lot on the south side of the site.

The existing sidewalk along Winchester Boulevard will remain and additional paved paths are proposed along the north and west sides of the development. A paved pedestrian walkway would also be located on the north side of the passenger drop off area and would connect to the central pool area and the lobby areas of each building.

Emergency vehicle access would be from the main drive aisle with a vehicle turn around at the passenger drop off area near the lobby areas of each building.

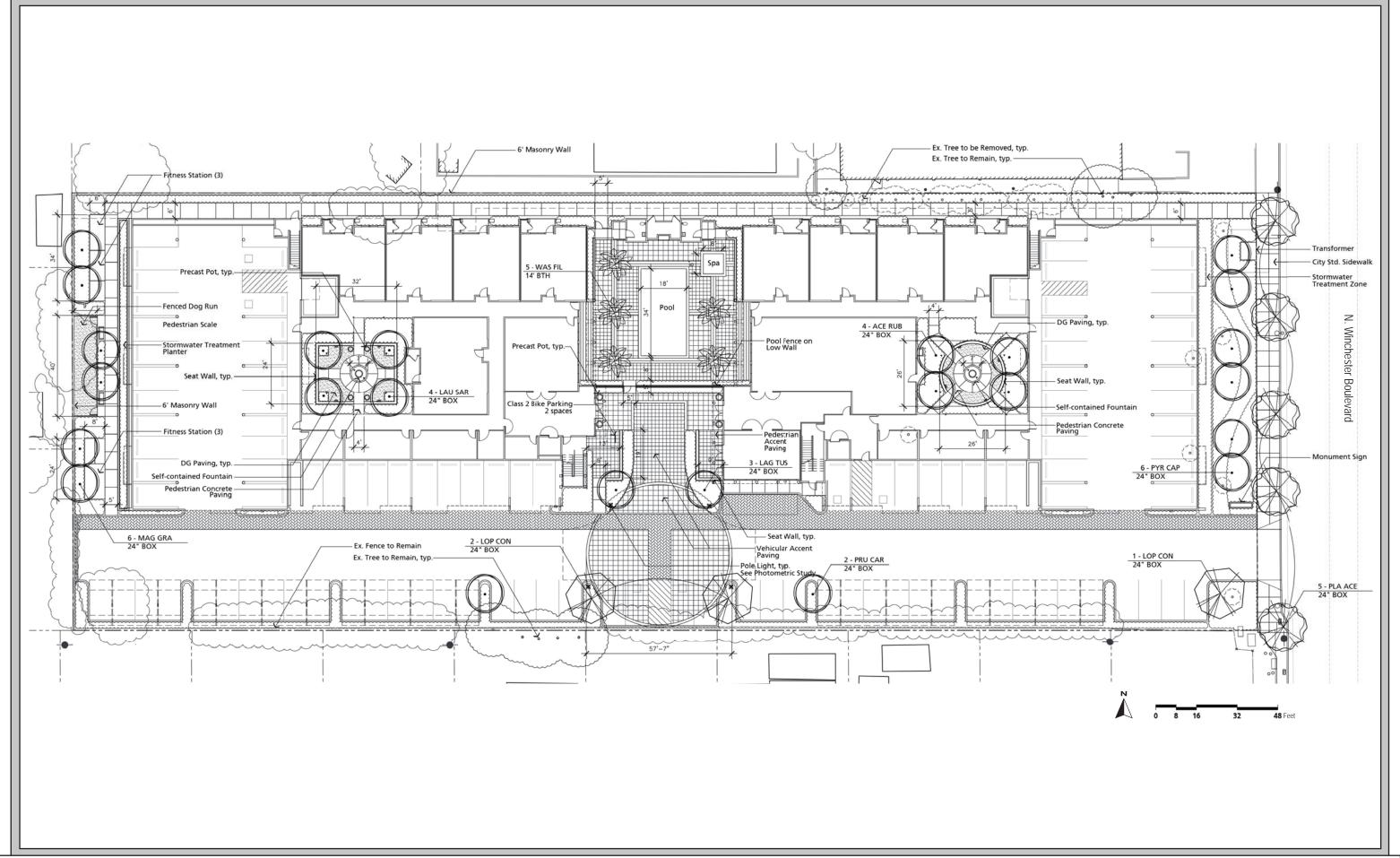
3.1.2 Communal Spaces and Landscaping

As mentioned above, the ground level of the proposed development would provide communal indoor and outdoor spaces. Indoor spaces would include a clubhouse, a fitness room, and a conference room. Outdoor spaces would include an outdoor pool with two adjacent courtyards and two courtyard gardens centrally located within each building. In addition, the project proposes a roof terrace on top of the third floor of the eastern residential building. The outdoor pool area would be centrally located on-site and include an equipment storage and shower facility, and would be accessible from the pedestrian path on the north side of the development.

Landscaping would consist of newly planted trees, shrubs, and groundcover along the project boundary, within the surface parking lot, and within the courtyards (see Figure 3.1-5 – Landscape Plan). It is assumed that all existing trees would be removed from the site.

3.2 GENERAL PLAN AND ZONING DESIGNATIONS

The project site is designated *Regional Commercial* in the General Plan and is intended for commercial developments that serve the residents of Santa Clara and the surrounding region. The designation permits a variety of retail uses including regional shopping centers, local-serving offices, medical facilities, home improvement/durable goods sales and services, warehouse membership clubs, new and used auto sales and services, and travel-related services such as hotels, gas stations, restaurants, convention centers, amusement parks and sports venues. A maximum floor-area-ratio (FAR) of 0.6 is allowed. The proposed project would develop 92 senior housing units on-site, which is inconsistent with the General Plan designation. Therefore, a General Plan Amendment to *High Density Residential* is proposed.



LANDSCAPE PLAN FIGURE 3.1-5

The project site is zoned OG – General Office and is intended for heavy employment developments such as business office centers and administrative facilities. The zoning district is typically near or located within a business or community/regional commercial area. Permitted uses include banks, restaurants, financial and general business offices, lodges and clubs, and instructional facilities (i.e., dance or music studios). The proposed senior housing development would be inconsistent with the current zoning district. There is currently no zoning designation consistent with the proposed General Plan designation. Therefore, the project proposes a Planned Development (PD) rezoning.

3.3 CONSTRUCTION

The project applicant proposes to utilize Tier 2 engines or equivalent (meeting U.S. EPA particulate matter emissions standards) for all diesel-powered off-road equipment larger than 50 horsepower and operating on-site for more than two days continuously. In addition, all diesel-powered portable equipment (i.e., air compressors, concrete saws, and forklifts) operating on-site for more than two days will meet U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent.

3.4 GREEN BUILDING MEASURES

The project proposes the following green building measures consistent with the 2013 California Green Building Standards Code (CGC) and the *Bay Area 2010 Clean Air Plan*:

- Energy efficient lighting;
- Fire resistant and durable roofing materials;
- Building materials and techniques to increase insulation;
- High efficient irrigation system;
- Landscaping with drought tolerate plants;
- New trees to mitigate the urban heat island effect; and
- Bike storage for residents and visitors.

Refer to Section 4.3, Air Quality for further discussion of the green building measures.

SECTION 4.0 SETTING, ENVIRONMENTAL CHECKLIST AND IMPACTS

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. "Mitigation Measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines §15370). Measures that are proposed by the applicant that will further reduce or avoid already less than significant impacts are categorized as "Avoidance Measures."

4.1 **AESTHETICS**

4.1.1 <u>Existing Setting</u>

Project Site

The project site is a relatively flat, rectangular shaped parcel that is currently developed with a three-story office building with ground floor parking and a large surface parking lot on the western portion of the site. The first level of the office building includes offices and a central atrium. A row of covered, ground-level parking spaces with a 22-foot wide drive aisle is located on the northern and southern portions of the site (Photos 1 and 2).

The building has a flat roof with extended eaves. The façade has narrow vertical siding and tinted windows. The centrally located main entry includes stone and concrete steps, concrete columns, and large stone planters on the north and south sides of the entry steps.

Landscaping consists of large trees on the northern boundary and shrubs and groundcover along the northern, southern, and western boundaries of the site. The trees help provide some visual screening between the office building and adjacent commercial property. Additional landscaping, including small ornamental trees, is located within the semi-circular landscaped area near the street frontage, and in the atrium of the building. An eight-foot high wood fence extends along the southern and western property line. An eight-foot chain linked fence extends along the northern boundary of the site (Photo 3).



PHOTO 1: View of the office building on the project site, looking west from Winchester Boulevard.



PHOTO 2: View of the atrium on the project site, looking north from the project site.



PHOTO 3: View of the western parking lot on the project site, looking northwest from the project



PHOTO 4: View of an office building on Winchester Boulevard, looking east from the project site.



PHOTO 5: View of a paint store on Winchester Boulevard, looking southeast from the project site.



PHOTO 6: View of a residence directly west of the project site, looking east from Jill Avenue.



PHOTO 7: View of a store directly north of the project site, looking south from Pruneridge Avenue.

Surrounding Land Uses

The project site is surrounded by various residential, commercial, and office uses as well as a specialized education center. Architectural styles vary within the neighborhood.

East of Winchester Boulevard is a mix of residential and commercial buildings ranging from one to two stories. (Photos 4 and 5) The buildings were constructed between 1950 and 1980 and generally have minimal landscape setbacks from the roadway with parking primarily in the back of the buildings. Buildings north of Fernwood Avenue tend to have large street trees, whereas buildings south of Fernwood Avenue have little to no street trees, making the buildings more visually prominent. Due to the extended time frame of development on the east side of Winchester Boulevard, there is no cohesive architectural style. Building facades are primarily stucco and stone with either shingled or tile roofs. The most distinctive building in the immediate project area is the paint store (immediately across Winchester Boulevard from the project site) which has a mid-century modern aesthetic with a flat roof, glass panel walls along the Winchester Boulevard street frontage and a large eave that extends from the roofline towards the street frontage supported by narrow metal posts support. An associated 30-foot tall hexagonal metal sign is located at the corner of Winchester Boulevard and Fernwood Avenue. Another prominent visual feature is the widening of Winchester Boulevard, north of Fernwood Avenue, to provide a small parking lot in front of an apartment complex.

South and west of the project site is a residential neighborhood comprised of one and two-story single-family houses. The neighborhood appears to be a planned subdivision constructed in the 1950s with standard floor plans. The houses primarily have stucco facades and gabled roofs with extended eaves over the porch and main entry. A typical house has at least one large window next to the main entry, shingled roofs, an attached two-car garage, and landscaping consists of a lawn area and plants in the front yard (Photo 6).

North of the project site, immediately adjacent to the project site, is a commercial building, a two-story apartment complex, and a small school (Photo 7). The commercial building at the southwest corner of Winchester Boulevard and Pruneridge Avenue is a single-story structure set back from both roadways by a large surface parking lot. The parking area is bordered by landscaping, including shrubs and small ornamental trees. Trees are also planted throughout the parking area. Similar to other buildings in the area, the structure has a stone and stucco façade and flat roof. The adjacent apartment complex was constructed in 1978 with a stucco and stone façade with a peaked roof. Mature trees are located throughout the site. The school building (originally an office building) was constructed in 1969 and has a stone and cement façade with prominent full wall height windows and a flat roof. Both the apartment and the school building are set back from the street with a landscape buffer and provide parking to the side and rear of the buildings.

North of Pruneridge Avenue is a small, two-story strip mall constructed in the mid-1950s. This shopping center has a more rustic aesthetic than the other commercial properties in the area. The buildings within the center have wood siding with brick wainscoting and wood shingled roofs. There is minimal landscaping at the corners of the property and one tree within the parking lot.

4.1.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
W	ould the project:					
1.	Have a substantial adverse effect on a scenic vista?					1,2,3
2.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?					1,2,3
3.	Substantially degrade the existing visual character or quality of the site and its surroundings?					1,2,3
4.	Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?					1,2,3

4.1.2.1 Aesthetic Impacts

Scenic Vista and Resources

The proposed project is located within an urban area of mixed uses (residential, commercial, office, and institutional) that has no designated scenic resources. The proposed project will alter the visual character of the neighborhood by placing two residential buildings up to four-stories tall on a site currently containing one three-story office building. Implementation of the proposed project would not, however, block views of any designated scenic vistas or scenic resources off-site. Therefore, the project would have a less than significant impact on scenic vistas or resources. (**No Impact**)

Visual Character

The project area is a mix of architectural styles with no particular design aesthetic being dominant. Because there is no predominant architectural style in the project area, the proposed building design would be compatible with the mixed visual character of the area. The project proposes a pedestrian-friendly streetscape by placing street trees and a landscaped area along Winchester Boulevard. Compared to the existing three-story office building, portions of the proposed residential development would be taller by one story. Because the site would be redeveloped with new residential buildings and the proposed buildings would be one-story taller than the existing building and any other buildings in the project area, the proposed project would somewhat change the visual character of the site and the neighborhood (Figure 4.1-1 Photosimulations).

KEY PLAN





VIEW 2 - AFTER



VIEW 3 - AFTER







The final project design would be reviewed by the City's Planning Division staff prior to issuance of building permits to ensure that the project would comply with community design standards. As a result, the project would have a less than significant impact on the visual character of the neighborhood. (**Less Than Significant Impact**)

Light and Glare

The project would include outdoor security lighting on-site, along the driveway, roadway and parking areas, entryways, and within the pool area and the courtyard gardens. The outside lighting would be comparable in brightness to the ambient lighting in the surrounding area. While increased lighting on-site, relative to the existing outdoor lighting, would increase the level of illumination in the area, the shields on the lights would limit lighting spillover effects on adjacent properties. ¹

The proposed building façades would be primarily stucco and wood, which are not reflective surfaces and would not result in substantial glare. Building materials and lighting plans would be reviewed by the City's Planning Division staff prior to issuance of building permits to ensure that the project would not create a substantial new source of light or glare for nearby residences or persons traveling on the local roadways. As a result, the project would have less than significant nighttime light and daytime glare impacts in the project area. (Less Than Significant Impact)

4.1.3 Conclusion

The project would have no impact on designated scenic resources. (No Impact)

The project would have a less than significant impact on the visual character of the project area. Construction of the proposed project would not result in substantial new sources of light or glare. Therefore, the project would have a less than significant aesthetics impact. (Less Than Significant Impact)

Santana Terrace Senior Apartments City of Santa Clara

¹ Lighting must comply with the City's Code for multiple dwelling zoning districts include Chapter 18.16, 18.18. and 18.20.

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 <u>Setting</u>

The project site is located in the City of Santa Clara in an area designated for urban uses. According to the Santa Clara County Important Farmlands 2012 Map, the project site is designated as "Urban and Built-up Land." In addition, the project site is not subject to a Williamson Act contract, and there are no forest lands on or adjacent to the project site.

4.2.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
W	ould the project:					
1.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					1,2,3,4
2.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?					1,2,3,4
3.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?					1,2,3
4.	Result in a loss of forest land or conversion of forest land to non-forest use?				\boxtimes	1,2,3
5.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?					1,2,3

4.2.2.1 Agriculture and Forestry Resources Impacts

The proposed project would demolish the existing building on-site and construct two residential buildings totaling 137,891 sf. The project would not convert *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance* to non-agricultural uses and would not conflict with existing

² "Urban and Built-up Land is defined as land with at least six structures per 10 acres and utilized for residential, institutional, industrial, commercial, landfill, golf course, and other urban-related purposes.

zoning for agricultural operations or facilitate unplanned conversion of farmland elsewhere in Santa Clara to non-agricultural uses. The project site is not utilized as forest land (nor are there forest lands in the vicinity) and would not result in the loss of forest lands in Santa Clara. For these reasons, the project would have no impact on agriculture or forestry resources. (**No Impact**)

4.2.3 Conclusion

The project would not result in any impacts to agricultural or forest lands. (No Impact)

4.3 AIR QUALITY

The following discussion is based in part on an Air Quality Assessment prepared by *Illingworth & Rodkin, Inc.* in July 2015. The report is attached as Appendix A.

4.3.1 Setting

4.3.1.1 Background Information

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of a pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and for photochemical pollutants, sunshine. The Bay Area typically has moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution. These factors give the Bay Area a relatively high atmospheric potential for pollution.

The Bay Area Air Quality Management District (BAAQMD) monitors air quality at several locations within the San Francisco Bay Air Basin. As shown in Table 4.3-1, violations of State and Federal standards at the downtown San José monitoring station (the nearest monitoring station to the project site) during the 2012-2014 period (the most recent years for which data is available) include high levels of ozone (O₃), PM₁₀, and PM_{2.5}.³ Violations of carbon monoxide (CO) standards have not been recorded since 1992.⁴

TABLE 4.3-1 Number of Ambient Air Quality Standards Violations and Highest Concentrations (2012-2014)					
Dellasterst	Ctondond	Da	ys Exceeding Stan	dard	
Pollutant	Standard	2012	2013	2014	
SAN JOSÉ STATION			·		
0	State 1-hour	1	1	0	
Ozone	Federal 8-hour	0	1	0	
Carbon Monoxide	Federal 8-hour	0	0	0	
Carbon Monoxide	State 8-hour	0	0	0	
Nitrogen Dioxide	State 1-hour	0	0	0	
PM_{10}	Federal 24-hour	0	0	0	
	State 24-hour	1	5	1	
PM _{2.5}	Federal 24-hour	2	6	2	

³ PM refers to Particulate Matter. Particulate matter is referred to by size (i.e., 10 or 2.5) because the size of particles is directly linked to their potential for causing health problems.

⁴ Bay Area Air Quality Management District. Annual Bay Area Air Quality Summaries. <http://www.baaqmd.gov/Divisions/Communications-and-Outreach/Air-Quality-in-the-Bay-Area/Air-Quality-Summaries.aspx Accessed June 3, 2015.

The pollutants known to exceed the State and Federal standards in the project area are regional pollutants. Ozone, PM₁₀, and PM_{2.5} are all considered regional pollutants because the concentrations are not determined by proximity to individual sources, but rather show a relative uniformity over a region.

The Bay Area as a whole does not meet State or Federal ambient air quality standards for ground level O_3 or State standards for PM_{10} , and $PM_{2.5}$. Based on air quality monitoring data, the California Air Resources Board (CARB) has designated Santa Clara County as a "nonattainment area" for O_3 and PM_{10} under the California Clean Air Act. The County is either in attainment or unclassified for other pollutants.

4.3.1.2 Toxic Air Contaminants

The Federal Clean Air Act defines Hazardous Air Pollutants (HAPs) as air contaminants identified by U.S. EPA as known or suspected to cause cancer, serious illness, birth defects, or death. In California, Toxic Air Contaminants (TACs) include all HAPs, plus other contaminants identified by CARB as known to cause morbidity or mortality (cancer risk). TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and Federal level. Unlike other emissions, TACs are measured based on the risk of human health rather than a set emission standard.

Diesel exhaust, a mixture of gases, vapors, and fine particles, is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the Statewide average). Diesel particulate matter (DPM) is of particular concern since it can be distributed over large regions, thus leading to widespread public exposure. CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy duty diesel trucks. These trucks represent the bulk of DPM emissions from California highways and include the solid waste collection vehicles, public and utility fleets, and the heavy-duty diesel trucks and buses.

4.3.1.3 Sensitive Receptors

BAAQMD defines sensitive receptors as facilities where population groups that are particularly sensitive to the effects of air pollutants (i.e., children, the elderly, and people with illnesses) are likely to be located. Examples include schools, hospitals, and residential areas. The existing residences east, south, and west of the site as well as the future residents on the project site would be considered sensitive receptors.

4.3.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wo	ould the project:					
1.	Conflict with or obstruct implementation of the applicable air quality plan?					1,2,3,5,7
2.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?					1,2,3,5,6, 7
3.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?					1,2,3,5,6,
4.	Expose sensitive receptors to substantial pollutant concentrations?					1,2,3,7
5.	Create objectionable odors affecting a substantial number of people?					1,2,3

4.3.3 Air Quality Impacts

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the Lead Agency and must be based to the extent possible on scientific and factual data. The City of Santa Clara and other Lead Agencies in the San Francisco Bay Area Air Basin often utilize the BAAQMD thresholds and methodology for assessing air emissions and/or health effects, which are based upon the scientific and other factual data prepared by BAAQMD in developing those thresholds.

In December 2010, the California Building Industry Association (BIA) filed a lawsuit in Alameda County Superior Court challenging TAC and PM_{2.5} thresholds adopted by BAAQMD in its CEQA Air Quality Guidelines (*California Building Industry Association v. Bay Area Air Quality Management District*, Alameda County Superior Court Case No. RG10548693). One of the identified concerns was inhibiting infill and smart growth in the urbanized Bay Area. On March 5, 2012, the Alameda County Superior Court issued a judgment that BAAQMD had failed to comply with CEQA when it adopted its thresholds. The Court issued a writ of mandate ordering the District to set aside the thresholds and cease disseminating them until the District fully complies with CEQA. BAAQMD appealed this ruling, and the Appellate Court overturned that decision, finding that adopting the thresholds did not amount to a project under CEQA (*California Building Industry Association v. Bay Area Air Quality Management District* (2013) 218 Cal.App.4th 1171). The Court of Appeal also found that the challenged thresholds were supported by substantial evidence. The

case is now in front of the State Supreme Court on one issue unrelated to the substance of particular thresholds or the evidence on which they are based.

In April 2012, BAAQMD revised their website in conformance with the superior court order, no longer recommending use of the 2010 thresholds in determining a project's significant air quality impacts. Based on the Appellate ruling, however, it is reasonable for agencies to conclude that the thresholds are based on substantial evidence and that they represent a reasonable method of determining significance. The City has carefully considered the thresholds prepared by BAAQMD and the recent court ruling, and regards the thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and PM_{2.5}. Evidence supporting these thresholds has been presented in the following documents:

- BAAQMD. Thresholds Options and Justification Report. 2009.
- BAAQMD. CEQA Air Quality Guidelines. May 2011. (Appendix D).
- California Air Pollution Control Officers Association (CAPCOA). *Health Risk Assessments for Proposed Land Use Projects*. 2009.
- California Environmental Protection Agency, California Air Resources Board (CARB). *Air Quality and Land Use Handbook: A Community Health Perspective*. 2005.

The analysis in this IS is based upon the general methodologies in the most recent BAAQMD CEQA Air Quality Guidelines (dated May 2012) and numeric thresholds for the San Francisco Bay Basin, including the thresholds listed in Table 4.3-2.

TABLE 4.3-2 Thresholds of Significance Used in Air Quality Analyses						
	Construction	Operatio	on-Related			
Pollutant	Average	Average	Maximum			
1 onder	Daily Emissions	Daily Emissions	Annual Emissions			
	(pounds/day)	(pounds/day)	(tons/year)			
ROG, NO _x	54	54	10			
PM ₁₀	82	82	15			
1 14110	(exhaust)	02	13			
PM25	54	54	10			
1 1412.5	(exhaust)	J+	10			
Fugitive Dust	BMPs	None	None			
$(PM_{10}/PM_{2.5})$	DIVII 9	Trone	Trone			
		Increased cancer risk	of >10.0 in one million			
Risk and Hazards for	Same as	 Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute) Ambient PM_{2.5} increase: > 0.3 μ/m³ [Zone of influence: 1,000-foot radius from 				
New Sources and	Operational					
Receptors (Project)	Threshold					
receptors (1 roject)						
		property line of source	e or receptor]			

TABLE 4.3-2 Thresholds of Significance Used in Air Quality Analyses					
Construction Operation-Related					
Pollutant	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)		
Risk and Hazards for New Sources and Receptors (Cumulative)	Same as Operational Threshold	 (pounds/day) (tons/year) Increased cancer risk of >100 in one million Increased non-cancer risk of > 10.0 Hazard Index (chronic or acute) Ambient PM_{2.5} increase: > 0.8 μ/m³ [Zone of influence: 1,000-foot radius from property line of source or receptor] 			
Sources: BAAQMD CEQA	Thresholds Options a	nd Justification Report (20	009) and BAAQMD		

4.3.3.1 Bay Area 2010 Clean Air Plan

CEQA Air Quality Guidelines (dated May 2012).

The most recent clean air plan is the *Bay Area 2010 Clean Air Plan* (2010 CAP) that was adopted by BAAQMD in September 2010. This plan addresses air quality impacts with respect to obtaining ambient air quality standards for non-attainment pollutants (i.e., O₃, PM₁₀ and PM_{2.5}), reducing exposure of sensitive receptors to TACs, and reducing greenhouse gas (GHG) emissions such that the region can meet Assembly Bill (AB) 32 goals of reducing emissions to 1990 levels by 2020.

The consistency of the proposed project with this regional plan is primarily a question of the consistency with the population/employment assumptions utilized in developing the 2010 CAP, which were based on the Association of Bay Area Government's (ABAG) projections. The proposed project would not be consistent with the City's General Plan without a General Plan Amendment because it proposes residential development on land currently designated for commercial development. This project is not, however, a substantial increase on a regional level and would not result in a major increase in housing in the City of Santa Clara relative to ABAG's projections.

The 2010 CAP also includes 55 control measures that are intended to reduce air pollutant emissions in the Bay Area either directly or indirectly. The control measures are divided into five categories that include:

- Measures to reduce stationary and area sources;
- Mobile source measures;
- Transportation control measures;
- Land use and local impact measures; and
- Energy and climate measures

The consistency of the proposed project was evaluated with respect to each set of control measures. The City of Santa also requires all new residential, commercial, or industrial buildings to comply with the mandatory measures in the 2013 California Green Building Standards Code (CGC).⁵

⁵ City of Santa Clara. Building Permit Information. December 20, 2013. http://santaclaraca.gov/index.aspx?page=2449> Accessed June 17, 2015.

Residential developments must comply with the 2013 CGC Residential Checklist, which includes all the mandatory measures.

The project would include the following green building measures, consistent with the 2013 CGC and the 2010 CAP:

- Energy efficient lighting;
- Fire resistant and durable roofing materials;
- Building materials and techniques to increase insulation;
- High efficient irrigation system;
- Landscaping with drought tolerate plants;
- New trees to mitigate the urban heat island effect; and
- Bike storage for residents and visitors.

The project would also include building fixtures that would comply with the 2013 Building Energy Efficiency Standards (Title 24) to reduce water use, energy use, and GHG emissions. Lastly, the project is located in proximity to existing transit and other services. Because the project is required to comply with the mandatory measures in the 2013 CGC for residential development and is consistent with applicable control measures in the 2010 CAP, it would not conflict with implementation of the 2010 CAP. (Less Than Significant Impact)

4.3.3.2 Operational Impacts to Regional and Local Air Quality

Operational Emissions

The proposed project would construct two residential buildings with up 92 units on-site. The 2011 BAAQMD CEQA Guidelines contain a screening table that lists criteria to provide a conservative indication of whether a project could result in potentially significant air quality impacts (e.g., emissions of 54 pounds per day of ROG, NO_x, PM_{2.5}, and 82 pounds per day of PM₁₀). For operational impacts from criteria pollutants, the screening size is 451 dwelling units. Projects that are smaller than the screening size would have a less than significant operational air quality impact.

The project is well below the screening size for the proposed land use. Therefore, the project would have a less than significant operational air quality impact for criteria pollutants and their precursors. (Less Than Significant Impact)

Carbon Monoxide Emissions

Congested intersections with a large volume of traffic have the greatest potential to cause high localized concentrations of CO. BAAQMD screening criteria indicate that a project would have a less than significant impact to CO levels if project traffic would not increase traffic levels at any affected intersection to more than 44,000 vehicles per hour. Intersections in the project area have traffic volumes of less than 10,000 vehicles per hour. The project would result in a net increase of approximately 62 peak hour traffic trips per day and would not cause any local intersection to exceed

44,000 vehicles per hour. As a result, the project would not result in a significant CO impact. (**Less Than Significant Impact**)

Community Risk Impacts – Toxic Air Contaminants

BAAQMD has recommended thresholds of significance for local community risk and hazard impacts applicable to both the siting of a new source and to the siting of a new receptor. Local community risk and hazard impacts are associated with TACs and PM_{2.5} because emissions of these pollutants can have significant health impacts at the local level. Although the project would include sensitive receptors, the project site is not in proximity to any major source of TACs (i.e., gas stations, industrial facilities, high traffic roadways) that could pose a risk to future residents. Therefore, implementation of the proposed project would have a less than significant TAC emissions impacts on future residents of the project site. (Less Than Significant Impact)

4.3.3.3 Construction Impacts

Criteria Air Pollutants and Precursors

As with operational emissions, BAAQMD developed screening criteria to provide a conservative indication of whether construction activities associated with a project could result in a potentially significant air quality impact from emissions of criteria air pollutants. For construction impacts from criteria pollutants, the screening size is 240 dwelling units. Projects that are smaller than the screening size are considered to have a less than significant operational air quality impact.

The 92-unit project is well below the screening size for the proposed land use. Therefore, the project would have a less than significant construction air quality impact from criteria pollutant emissions. (Less Than Significant Impact)

Construction Dust Emissions

Construction activities on the site would include demolition of the existing building and hardscape, trenching for utilities, and grading of the site, which would generate dust and other particulate matter. The generation of dust and other particulate matter could temporarily impact nearby residents.

Impact AIR-1: Construction activities would generate dust and other particulate matter that could impact adjacent and nearby residents. (Significant Impact)

Mitigation and Avoidance Measures

General Plan Policies

The policies of the City of Santa Clara General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Development under the proposed General Plan Amendment would be subject to existing General Plan policies, including those listed below.

Policy 5.10.2-P6: Require "Best Management Practices" for construction dust abatement.

Project Specific Mitigation Measures

The following mitigation measures will be implemented during construction to reduce dust and other particulate matter impacts:

MM AIR 1-1: All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

MM AIR 1-2: All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

MM AIR 1-4: All vehicle speeds on unpaved roads shall be limited to 15 mph.

MM AIR 1-5: All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible after grading to minimize dirt and soil exposure. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

MM AIR 1-6: Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

MM AIR 1-7: All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a qualified mechanic and determined to be running in proper condition prior to operation.

MM AIR 1-8: Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Implementation of the identified mitigation measures will reduce exhaust emissions by five percent and fugitive dust emission by 50 percent. Dust and other particulate matter generated during construction would be reduced to a less than significant level. (Less Than Significant Impact With Mitigation)

Community Risk Impacts – Toxic Air Contaminants

Emissions from construction-related automobiles, trucks, and heavy equipment are a primary concern due to releases of DPM, organic TACs from all vehicles, and $PM_{2.5}$, which is a regulated air pollutant. There are sensitive receptors (i.e., residents and children) surrounding the project site that could be exposed to TACs during the construction of the project. To quantify the effects of TACs on the adjacent sensitive receptors, construction period exhaust emissions were computed using the CalEEMod model. The U.S. EPA AERMOD dispersion model was used to predict concentrations of TACs at existing residences in the vicinity of the project site. The analysis was based on a one year construction period.

As noted in Section 3.3 of the Project Description, the project proposes to utilize Tier 2 engines or equivalent (meeting U.S. EPA particulate matter emissions standards) for all diesel-powered off-road equipment larger than 50 horsepower and operating on-site for more than two days continuously. In addition, all diesel-powered portable equipment (i.e., air compressors, concrete saws, and forklifts) operating on-site for more than two days will meet U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent. These factors were taken into account when modeling the construction emissions of the project.

The total annual $PM_{2.5}$ emissions for the off-road construction equipment and on-road vehicles (i.e., haul trucks, vendor trucks, and worker trucks) would be 0.013 tons (26 pounds) over the length of the entire construction period. Fugitive $PM_{2.5}$ dust emissions were calculated to be 0.008 tons (16 pounds) over the length of the entire construction period.

The risk for both a child exposure (3rd trimester through two years of age) and adult exposure was calculated based upon the project data. The cancer risks, $PM_{2.5}$ concentrations, and non-cancer risks from exposure to mobile and stationary sources are shown in Table 4.3-3 below.

TABLE 4.3-3 Summary of Cancer Risk, PM _{2.5} Concentrations, and Hazard Index During Construction							
Sensitive Receptor		er Risk nillion)	Annual PM _{2.5} Concentrations (µg/m³)*	Annual Chronic Inhalation of DPM (µg/m³)	Hazard Risk (µg/m³)		
Nearest residences	0.2 4.2 (adults) (children)		0.10	0.05	0.01		
BAAQMD's Significance Threshold	10	0.0	0.3	5	>1.0		
Significant Impact	No	No	No	No	No		
* The AERMOD dispersio	* The AERMOD dispersion model was used to calculate PM _{2.5} concentrations.						

The maximum incremental residential child cancer risk was calculated to be 4.2 cancer cases per million and the increased adult cancer risk would be 0.2 in one million. The cancer risk estimated for adults and children were well below the health risk threshold of 10 cancer cases per million.

The annual maximum PM_{2.5} concentration from construction activities and equipment was estimated at 0.52 micrograms per cubic meter ($\mu g/m^3$), exceeding BAAQMD's threshold of 0.3 $\mu g/m^3$.

Non-cancer community risks from chronic exposure to DPM were also analyzed. The threshold for chronic inhalation reference exposure level (REL) for DPM is five micrograms per cubic meter (μ/m^3) and the threshold for the Hazard Index is greater than one. The maximum annual non-cancer DPM concentration from construction activities would be $0.05~\mu/m^3$ and the maximum Hazard Index score is 0.01. The non-cancer community risks are below the thresholds.⁶ As a result, the proposed project would result in a less than significant community risk impact due to construction activities. (Less Than Significant Impact)

4.3.3.4 Odors

The proposed residential development would be located within a residential/commercial area and would not result in incompatible odors. While construction of the development would result in temporary exhaust emissions, it would not result in a significant odor impact. (**Less Than Significant Impact**)

Existing odors from the residential/commercial area would not result in a significant odor impact to the proposed residential development. (Less Than Significant Impact)

4.3.3.4 Cumulative Air Quality Impacts

Please refer to Section 4.18, Mandatory Findings of Significance, for a discussion of cumulative air quality impacts.

4.3.4 <u>Conclusion</u>

The project is consistent with the 2010 CAP and, therefore, would not conflict with any applicable air quality plans in the San Francisco Bay Area region. (Less Than Significant Impact)

The project would result in a less than significant operational air quality impact. (**Less Than Significant Impact**)

With implementation of identified mitigation measures, the project would result in a less than significant dust emissions impact due to construction activities. (**Less Than Significant Impact With Mitigation**)

Construction activities on the project site would not result in substantial pollutant concentrations that would impact nearby sensitive receptors. (Less Than Significant Impact)

The project site located in an area where the proposed development would not result in incompatible odors. (Less Than Significant Impact)

⁶ Concentration levels for contaminants that pose non-cancer health hazards are set by the California's Office of Environmental Health and Hazards (OEHHA).

4.4 BIOLOGICAL RESOURCES

4.4.1 <u>Background</u>

Biological resources include plants and animals and the habitats that support them. Individual plant and animal species that are identified as rare, threatened, or endangered under the State and/or Federal Endangered Species Act, and the natural communities of habitats that support them, are of particular concern. Sensitive natural communities (e.g., wetlands, riparian woodlands, and oak woodland) that are critical to wildlife or ecosystem function are also important biological resources.

The avoidance and mitigation of significant impacts to biological resources under CEQA is consistent with and complimentary to various Federal, State, and local laws and regulations that are designed to protect these resources. These regulations often mandate that project sponsors obtain permits that include measures to avoid and/or mitigate impacts required as permit conditions, prior to the commencement of development activities.

4.4.1.1 City of Santa Clara Tree Protection Policies

The City of Santa Clara's General Plan policies 5.3.1 and 5.10.1 protect all healthy trees for the following species: cedars, redwoods, oaks, olives, bay laurel, and pepper and all trees over 36 inches in circumference, or about 11 inches in diameter, when measured 48 inches above the ground surface.

4.4.2 <u>Existing Setting</u>

4.4.2.1 Overview of Habitat Found on the Project Site

The project site is currently an office building with a surface parking lot. There are trees along the boundaries of the project site and within the atrium of the office building. There is no native vegetation on-site.

4.4.2.2 Special Status Animal Species

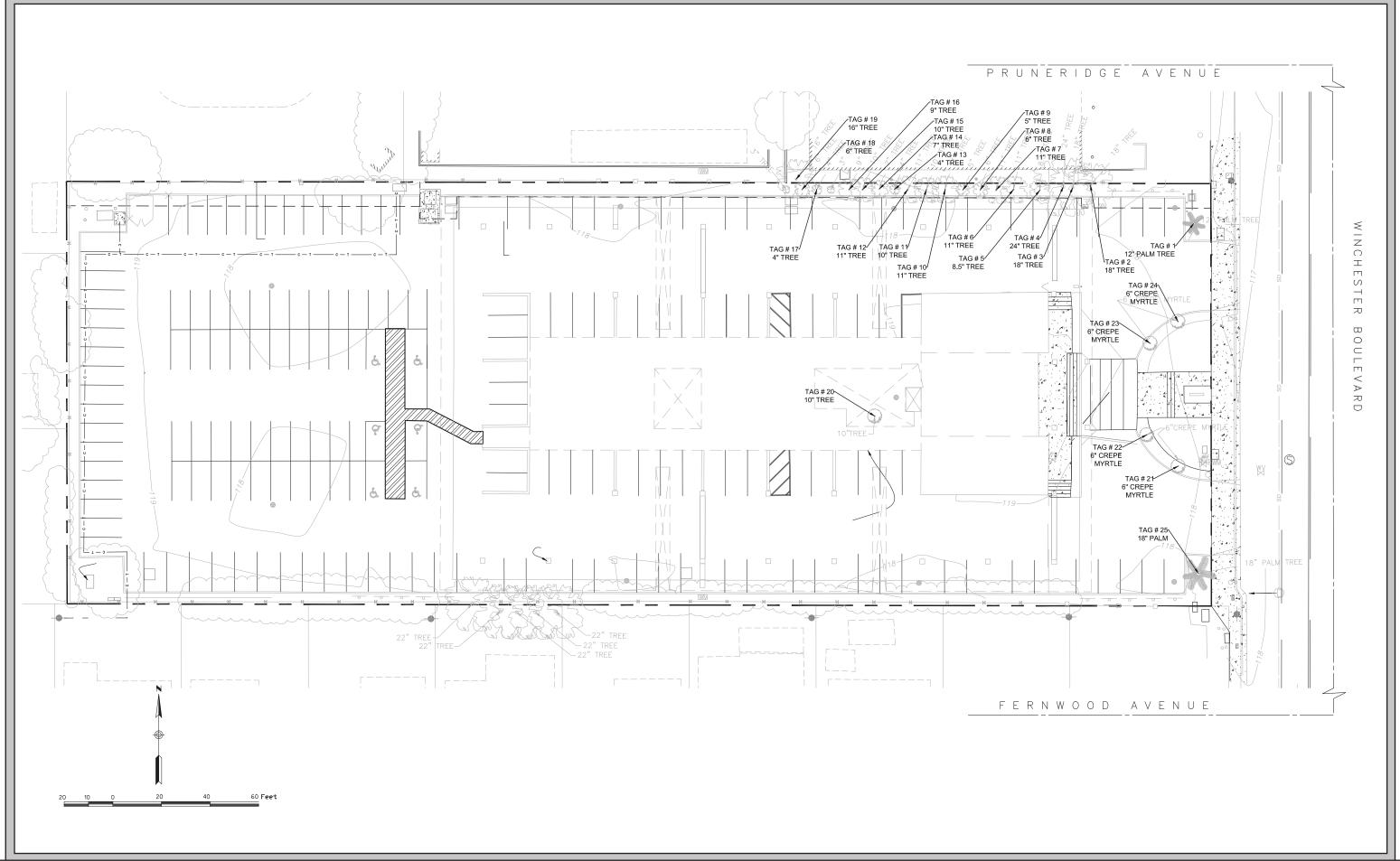
Special status species are those plants and animals listed under the State and Federal Endangered Species Acts (including candidate species); plants listed on the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (1994); and animals designated as Species of Special Concern by the California Department of Fish and Wildlife. Most special status animal species occurring in the Bay Area use habitats that are not present on the project site, including salt marsh, freshwater marsh, and serpentine grassland habitats. Since the native vegetation of the area is no longer present on-site, native wildlife species have been supplanted by species that are more compatible with an urbanized area.

4.4.2.3 Trees

Mature trees (both native and non-native) are valuable to the human environment for the benefits they supply in resisting global climate change (i.e., carbon dioxide absorption), protection from weather, because they provide nesting and foraging habitat for raptors and other migratory birds, and because they are a visual enhancement. Trees located on the project site are non-native species that vary in sizes. No native trees are present on the project site.

Of the 25 trees on-site, there are 17 African fern pines, four crape myrtles, two queen palms, one green ash, and one little-leaf fig. Based on the site plan, the analysis assumes all trees on-site will be removed as part of the project.

	Table 4.4-1		
	Summary of Trees	On-Site	
Tree #	Scientific Name	Common Name	Size*
1	Syagrus romanzoffiana	Queen Palm	12
2	Podocarpus gracilior	African Fern Pine	20
3	Podocarpus gracilior	African Fern Pine	11
4	Podocarpus gracilior	African Fern Pine	7
5	Podocarpus gracilior	African Fern Pine	8
6	Podocarpus gracilior	African Fern Pine	11.5
7	Podocarpus gracilior	African Fern Pine	3.8
8	Podocarpus gracilior	African Fern Pine	5.7
9	Podocarpus gracilior	African Fern Pine	4.6
10	Podocarpus gracilior	African Fern Pine	10.5
11	Podocarpus gracilior	African Fern Pine	9.4
12	Podocarpus gracilior	African Fern Pine	11
13	Podocarpus gracilior	African Fern Pine	4.5
14	Podocarpus gracilior	African Fern Pine	7.3
15	Podocarpus gracilior	African Fern Pine	8.1
16	Podocarpus gracilior	African Fern Pine	9
17	Podocarpus gracilior	African Fern Pine	3.8
18	Podocarpus gracilior	African Fern Pine	6
19	Fraxius pennsylvanica	Green Ash	16
20	Ficus microcaspa	Little-leaf Fig	9
21	Largerstroemia indica	Crape Myrtle	6.7
22	Largerstroemia indica	Crape Myrtle	6.3
23	Largerstroemia indica	Crape Myrtle	6.2
24	Largerstroemia indica	Crape Myrtle	6.7
25	Syagrus romanzoffiana	Queen Palm	13.4
Diameter in inch	es measured at 48-inches above the g	ground	



TREE MAP

4.4.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wo	ould the project:					
1.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?					1,2,3
2.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?					1,2,3
3.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					1,2,3
4.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?					1,2,3
5.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					1,2,3
6.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					1,2,3

4.4.2.1 Biological Resources Impacts

The proposed project is an infill development located within an urbanized area. Due to the fact that there are currently no sensitive or natural habitats on the project site, no significant impacts to natural plant communities, special status, or endangered species would result from the project. (**No Impact**)

There are no federally protected wetlands on-site or in the project vicinity as defined by Section 404 of the Clean Water Act. Therefore, implementation of the proposed project would have no impact on federally protected wetlands. (**No Impact**)

The project site is not within any protected conservation plan area, such as the Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other official local, regional, or State habitat conservation plan. Therefore, implementation of the proposed project would have no impacts to existing conversation plans. (**No Impact**)

Nesting Raptors and Migratory Birds

While the project site is located within an urban environment, the mature trees on-site and on the adjacent properties could provide nesting habitat and/or foraging habitat for raptors and migratory birds.

Migratory birds like nesting raptors are protected under the Migratory Bird Treaty Act and the California Fish and Game Code Sections 3503, 3503.5, and 2800. Construction of the proposed project may result in loss of fertile eggs or nestlings, or lead to nest abandonment in raptor habitat. The loss of mature trees on-site would result in nesting raptors having to relocate to another site. Relocation of mature raptors or migratory birds would not, by itself, be significant.

The California Department of Fish and Wildlife (CDFW)⁷ defines "taking" as causing abandonment and/or loss of reproductive efforts through disturbance.

Impact BIO-1:

Construction activities associated with the proposed project could result in the loss of fertile eggs, nesting raptors or other migratory birds, or nest abandonment. (**Significant Impact**)

Mitigation and Avoidance Measures

General Plan Policies

The policies of the City of Santa Clara General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Development under the proposed General Plan Amendment would be subject to existing General Plan policies, including those listed below.

Policy 5.10.1-P1: Require environmental review prior to approval of any development with the potential to degrade the habitat of any threatened or endangered species.

Project-Specific Mitigation

The following mitigation measures will be implemented during construction to avoid abandonment of raptor and other protected migratory birds nests:

⁷ Formally the California Department of Fish and Game.

MM BIO 1-1:

Construction shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1 through August 31.

MM BIO 1-2:

If it is not possible to schedule demolition and construction between September and January, pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1 through April 30) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1 through August 31). During this survey, the ornithologist will inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with California Department of Fish and Wildlife, will determine the extent of a construction-free buffer zone to be established around the nest, typically 250 feet, to ensure that raptor or migratory bird nests will not be disturbed during project construction.

With implementation of the identified measures, the project would result in a less than significant impact on raptors and migratory birds. (Less Than Significant Impact With Mitigation)

4.4.2.2 Trees

The proposed project would remove 25 existing trees on-site. The loss of 25 trees on-site could somewhat decrease the number and variety of bird species in the project vicinity by reducing available habitat for nesting and foraging. The project does, however, propose to plant new landscaping in the courtyards and around the perimeter of the site. The City's General Plan (Policy 5.3.1-P10) requires new development to include new street trees and at least a 2:1 on- or off-site replacement for removal of existing trees. The project would be required to plant a minimum of 50 trees, either on-site or off-site, to offset the loss of the trees to be removed as a result of the project. Currently, the project proposes installation of 62 trees on-site, exceeding the tree replacement requirement. If any trees adjacent to the site are removed due to deterioration or construction injury, the project would need to offset the loss of trees in accordance with General Plan Policy 5.3.1-P10. Because the project would be required to comply with the City's tree replacement policy, the loss of trees on-site would result in a less than significant impact on trees in the project area. (Less than Significant Impact)

4.4.3 Conclusion

Conformance with City policies and implementation of the identified mitigation measures would result in a less than significant impact on biological resources. (Less Than Significant Impact With Mitigation)

4.5 CULTURAL RESOURCES

The following discussion is based, in part, on an Archaeological Literature Review prepared by *Holman & Associates* in April 2015. A copy of the report is located at City Hall and can be accessed during normal business hours.

4.5.1 Setting

Although no archaeological resources have been documented on the site, there is potential for subsurface resources due to the known prehistoric and historic occupation of Santa Clara. Similarly, there are no existing conditions or immediate evidence that would suggest the presence of subsurface historic or prehistoric resources on the project site; however, it is located in an area of the Santa Clara Valley which is considered culturally sensitive for subsurface archaeological resources.

4.5.1.1 Prehistoric Resources

Native American settlements are commonly associated with the abundant food supply in the Santa Clara Valley and they often established settlements near local waterways. The project site is located 2.4 miles northwest of Los Gatos Creek and 1.6 miles southeast of Saratoga Creek, the nearest waterways. The distance from the creeks decreases the likelihood that subsurface artifacts would be located on-site.

4.5.1.2 Historic Resources

There are no historic resources on-site or adjacent to the project site. The existing office building on-site was constructed in 1967 and is approximately 48 years old.⁸ It is a three-story, office building with vertical wood siding and a flat roof with extended eaves. Historically, the project area supported agricultural uses, primarily orchards. The nearest documented historic resource is approximately 0.2 miles south of the site.

4.5.1.3 Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in a geologic strata. The project site is underlain by Holocene (basin) soil deposits. Geologic units of Holocene age are generally not considered sensitive for paleontological resources, because biological remains younger than 10,000 years are not usually considered fossils. These sediments have low potential to yield fossil resources or to contain significant nonrenewable paleontological resources; however, these recent sediments overlie sediments of older Pleistocene sediments with high potential to contain paleontological resources. These older sediments, often found at depths of 10 feet or more below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates.

⁸ The age of the building was ascertained using the data available from the City of Santa Clara on-line permit center. http://santaclaraca.gov/index.aspx?page=1015 Accessed June 16, 2015.

⁹ City of Santa Clara. *Integrated Final Environmental Impact Report Draft General Plan 2010-2035*. Page 323. January 2011.

4.5.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wou	ld the project:					
5	Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?					1,2,3,8
S	Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?					1,2,3,8
ŗ	Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?					1,2,3,8
	Disturb any human remains, including those nterred outside of formal cemeteries?					1,2,3,8

4.5.2.1 Impacts to Cultural Resources

Subsurface Prehistoric and Historic Resources

The project site has a low potential for containing prehistoric archaeological resources due to its distance from Los Gatos Creek (2.4 miles) and Saratoga Creek (1.6 miles). Furthermore, there are no documented prehistoric archaeological resources within a quarter mile radius of the project site. Although there are no reports of any archaeological finds on-site, there is a probability that demolition of the existing building and trenching for utilities could uncover and damage as yet unrecorded subsurface resources.

Impact CUL – 1: Subsurface cultural resources could be uncovered during demolition/construction of the proposed project. (Significant Impact)

Mitigation and Avoidance Measures

General Plan Policies

The policies of the City of Santa Clara General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Any future development under the proposed General Plan Amendment would be subject to existing General Plan policies, including the following:

Policy 5.6.3-P1: Require that new development avoid or reduce potential impacts to archaeological, paleontological and cultural resources.

Policy 5.6.3-P3: Consult with California Native American tribes prior to considering amendments to the City's General Plan.

Policy 5.6.3-P5: In the event that archaeological/paleontological resources are discovered, require that work be suspended until the significance of the find and recommended actions are determined by a qualified archaeologist/paleontologist.

Policy 5.6.3-P5: In the event that human remains are discovered, work with the appropriate Native American representative and follow the procedures set forth in State law.

Project-Specific Mitigation

The following mitigation measures will be implemented during construction to avoid significant impacts to unknown subsurface cultural resources.

MM CUL-1.1:

Prior to initiation of any ground disturbing activities on-site, all earth-moving personnel will be required to attend sensitivity training for cultural resources. The training will review the types of archaeological resources that might reasonably be found on the project site and the laws for the protection of those resources. The training will be led by a qualified archaeologist. Confirmation of the training being completed by all required personnel will be submitted to the Director of Planning and Inspection by the archaeologist prior to issuance of grading permits.

MM CUL-1.2:

In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Planning and Inspection will be notified, and the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery during monitoring would be submitted to the Director of Planning and Inspection.

MM CUL-1.3:

In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

With implementation of these mitigation measures, impacts to unknown subsurface prehistoric and historic archaeological resources would be less than significant. (Less Than Significant Impact with Mitigation)

Historic Structures

The project proposes to demolish the existing building on-site and construct two residential buildings with up to 92 units. Since there are no historic structures immediately adjacent to the project site and the existing office building is less than 50 years old, the minimal age to be considered historic, it is not eligible for the California or National Registers or the City's Architecturally or Historically Significant Properties list. Therefore, implementation of the proposed project would have no impact on historic structures. (**No Impact**)

Paleontological Resources

The project does not propose any underground structures (such as parking) and trenching for new utilities would not reach 10 feet in depth. Due to the limited subsurface disturbance that will occur and ground disturbance that has already occurred on-site, the potential for discovery of significant paleontological resources on the project site is low. In addition, the most recent paleontological discovery was the remains of a fossilized mammoth along the Guadalupe River in San José, which is not near the project site. For all these reasons, implementation of the proposed project will have a less than significant impact on paleontological resources. (Less Than Significant Impact)

4.5.3 Conclusion

With implementation of the identified mitigation measures described above, the proposed project would have a less than significant impact on subsurface prehistoric and historic archaeological resources. (Less Than Significant Impact with Mitigation)

Implementation of the proposed project would have no impact on historic structures (No Impact)

Implementation of the proposed project will have a less than significant impact on paleontological resources. (Less Than Significant Impact)

4.6 GEOLOGY AND SOILS

The following discussion is based, in part, on a Geotechnical Report prepared by *Krazan & Associates* in March 2015 and a Soil Resource Report generated from the United States Department of Agriculture Natural Resource Conservation Service's Web Soil Survey website on June 2015. Copies of the reports are attached in Appendix B.

4.6.1 Setting

4.6.1.1 Soils and Groundwater

The project site is located in the Santa Clara Valley, a relatively flat alluvial basin south of the San Francisco Bay, north and northeast of the Santa Cruz Mountains, and west of the Diablo Mountain Range.

Native soils beneath the project site are identified as Urban land-Flaskan complex underneath most of the western (rear) parking lot and Urban land-Campbell complex underneath the remaining parking lot, office building, and landscaping along the street frontage. The Urban land-Flaskan complex is characterized as sandy loam with very good natural drainage and a low to moderate expansion potential up to five feet deep. The Urban land-Campbell complex is characterized as silty loam to silty clay loam with moderate natural drainage, and a moderate to very high expansion potential up to three feet deep. Based on soil borings between five feet and ten feet deep, the soils on-site vary from dense silty sand to silty clay. Expansive soils shrink and swell as a result of moisture changes. These changes can cause heaving and cracking of slabs-on-grade, pavement, and structures found on shallow foundations.

Groundwater, historically, was documented at a minimum of 20 feet below the ground surface (bgs).¹¹

4.6.1.2 Seismicity

The San Francisco Bay Area is one of the most seismically active region in the United States. Strong ground shaking can be expected at the site during moderate to severe earthquakes in the general region. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well defined active fault zones of the San Andreas Fault System, which regionally trends in a northwesterly direction.

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¹⁰ United States Department of Agriculture, Natural Resources Conservation Service. "Web Soil Survey: Santa Clara Area, California, Western Part." http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Accessed June 17, 2015.

¹¹ Krazan and Associates. Geotechnical Report – 100 N. Winchester Boulevard. March 26, 2015.

The site is not located within a designated Alquist-Priolo Earthquake Fault Zone¹² or in a Santa Clara County Fault Hazard Zone¹³ and no active faults have been mapped on-site. Therefore, the risk of fault rupture at the site is low. Faults in the region are, however, capable of generating earthquakes of magnitude 7.0 or higher and strong to very strong ground shaking would be expected to occur at the project site during a major earthquake on one of the nearby faults. Active faults near the project site are shown in Table 4.6-1.

TABLE 4.6-1 Active Faults Near the Project Site				
Fault	Distance from Site			
Monte Vista – Shannon	5 miles W			
San Andreas	9 miles W			
Hayward	10 miles E			
Calaveras	11 miles E			
Zayante – Vergeles	16 miles N			

4.6.1.3 Liquefaction and Lateral Spreading

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loose, water-saturated soils from a solid state to a liquid state during ground shaking. There are many variables that contribute to liquefaction, including the age of the soil, soil type, soil cohesion, soil density, and depth to groundwater. The proposed project site is located within a mapped liquefaction hazard zone.¹⁴

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as the steep bank of a stream channel. The project site is located in an urban area with no nearby channels or creeks. The nearest waterway is Saratoga Creek, approximately 1.6 miles northwest of the site. Therefore, it is unlikely that lateral spreading would occur on-site.

¹² California Department of Conservation Website. http://www.quake.ca.gov/gmaps/ap/ap_maps.htm Accessed June 17, 2015.

Santa Clara County Planning and Development Department. Geologic Hazards Zones – Maps. February 2015.
 https://sccplanning.maps.arcgis.com/home Accessed June 17, 2015.
 Ibid.

Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wo	ould the project:					
1.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	_	_	_	_	
	a. Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)					1,2,3,9, 10,11
	b. Strong seismic ground shaking?					1,2,3,9, 10,11
	c. Seismic-related ground failure, including liquefaction?					1,2,3,9, 10,11
	d. Landslides?					1,2,3,9, 10,11
2.	Result in substantial soil erosion or the loss of topsoil?					1,2,3
3.	Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?					1,2,3,9, 10,11
4.	Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?					1,2,3,9, 10
5.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					1

4.6.2.1 Geology, Soils, and Seismicity Impacts

The project site and surrounding area are relatively flat and, as a result, the project would not be exposed to landslide or erosion related hazards. The project site has a moderate potential for liquefaction and a low potential for lateral spreading during large seismic events.

The proposed project would be required to comply with the design-specific geotechnical report prior to issuance of building permits that would address the potential for liquefaction and undocumented fill. The proposed project would be built and maintained in accordance with the design-specific

geotechnical report and applicable regulations including the most recent California Building Code which contains the regulations that govern the construction of structures in California. The geotechnical report includes recommendations for site preparation, utility trenching, building foundations, floor slabs, and drainage and landscaping.

In addition to the specifications in the geotechnical report, the project would be designed and constructed in accordance with standard engineering safety techniques and City Code requirements to reduce soil and geological impacts to a less than significant level.

Because the proposed project would comply with the design-specific geotechnical report, the California Building Code, and applicable City Code requirements to ensure that geologic hazards are adequately addressed, the project would not result in a significant geologic impact. (Less Than Significant Impact)

The project site is located within an urbanized area of Santa Clara where sewers are available to dispose wastewater from the project site. Therefore, the site will not need to support septic tanks or alternative wastewater disposal systems. (**No Impact**)

4.6.3 <u>Conclusion</u>

With implementation of recommendations in the design-specific geotechnical report and conformance to the 2013 California Building Code and City Code requirements, the project would have a less than significant impact due to geologic conditions on-site. (**Less Than Significant Impact**)

Since sewers are available to dispose wastewater from the project site, the soil on-site will not need to support septic tanks or alternative wastewater disposal systems. (**No Impact**)

4.7 GREENHOUSE GAS EMISSIONS

The following discussion is based in part on a Greenhouse Gas Emissions Assessment prepared by *Illingworth & Rodkin, Inc.* in April 2015. The report is attached as Appendix A.

4.7.1 <u>Setting</u>

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

4.7.2 Regulatory Background

4.7.2.1 State of California

State of California Executive Order S-3-05

In June 2005, Governor Schwarzenegger issued Executive Order S-3-05, which identified CalEPA as the lead coordinating State agency for establishing GHG emission reduction targets in California. A "Climate Action Team," a multi-agency group was set up to implement Executive Order S-3-05. Under this order, the State plans to reduce GHG emissions to 80 percent below 1990 levels by 2050.

Assembly Bill (AB) 32 – The California Global Warming Solutions Act of 2006

California Assembly Bill (AB) 32, the California Global Warming Solutions Act, was signed into law in September 2006. With the passage of AB 32, the State of California made a commitment to reduce GHG emissions to 1990 levels by 2020, which represents about a 30 percent decrease over current levels. CARB's Discrete Early Actions include maximizing energy efficient building and appliance standards, pursuing additional efficiency efforts, including new technologies and new policy and implementation mechanisms, and pursuing comparable investment in energy efficiency by all retail providers of electricity in California (including both investor-owned and publicly-owned utilities). In December 2008, CARB approved the Climate Change Scoping Plan, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals.

On May 22, 2014, CARB adopted an updated Scoping Plan document. The 2014 update defines CARB's climate change priorities for the next five years and lay the groundwork to start the

transition to the post-2020 goals set forth in Executive Order S-3-05 and B-16-2012.¹⁵ The 2014 update highlights California's progress toward meeting the near-term 2020 greenhouse gas emission reduction goals defined in the 2008 Scoping Plan and evaluate how to align the State's longer-term greenhouse gas reduction strategies with other State policy priorities such as those for water, waste, natural resources, agriculture, clean energy, transportation, and land use.

Senate Bill 375

Senate Bill 375 (SB 375), also known as the Sustainable Communities and Climate Protection Act of 2008, requires regional transportation plans to include a Sustainable Communities Strategy (SCS) that links transportation and land use planning together into a more comprehensive, integrated process. The SCS is a mechanism for more effectively linking a land use pattern and a transportation system together to make travel more efficient and communities more livable. The result is reduced GHG emissions from passenger vehicles along with other benefits. The target for the Bay Area is a seven percent per capita reduction in GHG emissions attributable to automobiles and light trucks by 2020 and a 15 percent per capita reduction by 2035.

Consistent with the requirements of SB 375, MTC and ABAG adopted *Plan Bay Area* in July 2013 as part of the Regional Transportation Plan process. The strategies in the plan are intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions. The project site is not located in a PDA.

Executive Order B-30-15

On April 29, 2015, Governor Edmund G. Brown Jr. issued Executive Order B-30-15, setting a new interim statewide greenhouse gas emission reduction target. The purpose of establishing the interim target is to ensure California meets its previously established target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050, as set forth in Executive Order S-3-05 in 2005. Under Executive Order B-30-15, the interim target is to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030.

As a part of this effort, the California Air Resources Board is required to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. The California Air Resources Board will initiate a public process in the summer of 2015 to update the State's Climate Change Scoping Plan. The updated Scoping Plan will provide a framework for achieving the 2030 target and will be completed and adopted by the Air Resources Board in 2016.

This Executive Order also calls for the California Natural Resources Agency to update the State of California's climate adaption strategy, *Safeguarding California*, every three years. The Safeguarding California plan will identify vulnerabilities to climate change by region and sector, including water, energy, transportation, public health, agriculture, emergency services, forestry, biodiversity and

¹⁵ Executive Order B-16-2012, issued by Governor Brown in March 2012, calls for expanded infrastructure to support zero emission vehicles and sets benchmarks for future state fleet vehicle purchases of zero emission vehicles. The executive order is available online at: http://gov.ca.gov/news.php?id=17472

habitat, and ocean and coastal resources. It also will identify actions needed to reduce risks to residents, property, communities, and natural systems from the vulnerabilities. A lead agency or group of agencies will be identified to lead adaptation efforts in each sector. Overall, the Natural Resources Agency will be responsible for ensuring that the provisions in the State's climate adaption strategy are fully implemented and State agencies must take climate change impacts into account in their planning decisions, including for all infrastructure projects.

4.7.2.2 2010 Bay Area Clean Air Plan

BAAQMD identifies thresholds of significance for operational GHG emissions from land-use development projects in its CEQA Air Quality Guidelines. These guidelines include recommended significance thresholds, assessment methodologies, and mitigation strategies for GHG emissions. The BAAQMD CEQA Guidelines also outline a methodology for estimating GHGs.

The Bay Area 2010 Clean Air Plan (CAP) is a multi-pollutant plan that addresses GHG emissions along with other air emissions in the San Francisco Bay Area Air Basin. One of the key objectives in the CAP is climate protection. The 2010 CAP includes emission control measures in five categories: Stationary Source Measures, Mobile Source Measures, Transportation Control Measures, Land Use and Local Impact Measures, and Energy and Climate Measures. Consistency of a project with current control measures is determined by its consistency with the CAP. The current CAP also includes performance objectives, consistent with the State's climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

4.7.2.3 City of Santa Clara General Plan

The Santa Clara 2010-2035 General Plan includes policies that address the reduction of greenhouse gas emissions during the planning horizon of the General Plan. Goals and policies that address sustainability (see Appendix 8.13: Sustainability Goals and Policies Matrix in the General Plan) are aimed at reducing the City's contribution to GHG emissions. As described below, the development of a comprehensive GHG emissions reduction strategy for the City is also included in the General Plan.

Climate Action Plan

In December 2013, the City of Santa Clara adopted a comprehensive GHG emissions reduction strategy (Climate Action Plan or "CAP") to achieve its fair share of Statewide emissions reductions by the year 2020 consistent with AB 32, the Global Warming Solutions Act. The City of Santa Clara CAP specifies the strategies and measures to be taken for a number of focus areas (coal-free and large renewables, energy efficiency, water conservation, transportation and land use, waste reduction, etc.) citywide to achieve the overall emission reduction target, and includes an adaptive management process that can incorporate new technology and respond when goals are not being met.

A key reduction measure that is being undertaken by the City of Santa Clara under the CAP is in the Coal-Free and Large Renewables focus area. The City of Santa Clara operates Silicon Valley Power (SVP), a publicly owned utility that provides electricity for the community of Santa Clara, including

the project site. Since nearly half (48 percent) of Santa Clara's GHG emissions result from electricity use, removing GHG-intensive sources of electricity generation (such as coal) is a major focus area in the CAP for achieving the City's GHG reduction goals. This measure is being undertaken by Silicon Valley Power.

CEQA clearance for all discretionary development proposals are required to address the consistency of individual projects with reduction measures in the CAP and goals and policies in the General Plan designed to reduce GHG emissions. Compliance with appropriate measures in the CAP would ensure an individual project's consistency with the adopted GHG reduction plan. Projects that are consistent with the CAP would have a less than significant impact related to GHG emissions.

4.7.3 Existing On-Site GHG Emissions

The project site is currently developed with a three-story, 65,000 sf office building. GHG emissions are generated by daily traffic trips of employees and visitors and water and electricity usage and are estimated to be 837 metric ton (MT) of carbon dioxide per year (CO₂e/yr).

4.7.3 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					1,2,3,7
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?					1,2,3,7

4.7.3.1 Greenhouse Gas Emissions Impacts

Operational GHG Emissions

In 2011, BAAQMD developed screening criteria to provide a conservative indication of whether a project could result in potentially significant GHG impacts. If the screening criteria are not exceeded by the project, then a detailed assessment of GHG emissions is not required because the project is assumed to result in a less than significant air quality impact. The proposed project exceeds the BAAQMD screening size for operational GHG emissions (78 dwelling units for condos). As a result, the projected GHG emissions from the project were evaluated through the CalEEMod modeling program.

BAAQMD's threshold for GHG emissions is 1,100 MT of CO₂e/yr. GHG emissions were calculated based on an operational start year of 2018. The model calculated emissions for transportation, area sources, electricity consumption, natural gas combustion, electricity usage associated with water

usage and wastewater discharge, and solid waste landfilling and transportation, as shown in Table 4.7-1 below.

TABLE 4.7-1 Annual Project GHG Emissions in Metric Tons (CO ₂ e)				
Source Category	2018 Project Emissions			
Area	5			
Energy Consumption	131			
Mobile	264			
Solid Waste Generation	19			
Water Usage	18			
Total Emissions Per Year	437			
BAAQMD Bright-Line Threshold	1,100			

The proposed project would generate approximately 437 MT of CO₂e/yr, which is 400 MT of CO₂e/yr less than the emissions resulting from operation of the existing office building (837 MT of CO₂e/yr). Therefore, the project would not exceed the emissions threshold for GHGs and would have a less than significant impact. (**Less Than Significant Impact**)

Construction GHG Emissions

Greenhouse gases would be emitted during demolition of the existing building and hardscape, grading of the site, and construction of the project. Construction of the project would involve emissions associated with equipment, vehicles, and manufacturing materials used to construct the project.

Per General Plan Policy 5.10.3-P3, the project would reduce energy consumption through sustainable construction practices such as salvaging and recycling discarded building materials (i.e., existing hardscape and remnant materials from construction) in order to reduce the amount of demolition and construction waste going to the landfill. The project site is an infill site located in an urbanized location within close distance to construction supplies and equipment. These project features would help to minimize GHG emissions generated by transport of construction materials and waste associated with the project.

Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. Neither the City of Santa Clara nor BAAQMD has established a quantitative threshold or standard for determining whether a project's construction-related GHG emissions are significant. Nevertheless, it is estimated that project construction will generate approximately 247 MT of CO₂e/yr. Because project construction will be a temporary condition (approximately 12 months) and would not result in a permanent increase in emissions that would interfere with the implementation of AB 32, the increase in emissions would be less than significant. (Less Than Significant Impact)

4.7.3.2 Climate Action Plan

As noted in *Section 4.4.1.2*, development of the proposed project would be subject to applicable measures in the Climate Action Plan, including those listed below.

Water Conservation Measures

Measure 3.1 Water Conservation calls for a reduction in per capita water use to meet Urban Water Management targets by 2020. Development standards for water conservation will be applied to increase efficiency in indoor and outdoor water use areas. Water conservation measures include the use of:

- water efficient landscaping with low water usage plant material to minimize irrigation requirements; and
- low flow toilets and plumbing fixtures in the building.

Waste Reduction Measures

Measure 4.2 Increase Waste Diversion calls for expansion of recycling efforts, curbside food waste pickup, and construction and demolition waste programs to increase solid waste diversion from 58 to 80 percent citywide. Consistent with the CAP, the project applicant will work with the City to implement an on-site recycling program.

Transportation and Land Use Measures

Measure 6.1 Transportation Demand Management Program requires new residential development with more than 25 units or non-residential developments more than 10,000 square feet in Transportation Districts to implement a TDM program.

The proposed project would result in a net decrease in daily traffic trips compared to the existing land use. In addition, it will place housing within walking distance of transit and services. The project site is not located in a Transportation District.

Because the project will be required to comply with the Climate Action Plan, the project would have a less than significant impact related to GHG emissions. (Less Than Significant Impact)

4.7.4 Conclusion

The project would generate fewer GHG emissions than the existing office building and would be consistent with the City's CAP. As a result, the project would result in a less than significant impact on regional air quality. (Less Than Significant Impact)

Construction of the proposed project would have a less than significant short-term GHG emissions impact. (Less Than Significant Impact)

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on a Phase I Environmental Site Assessment, a Phase II Limited Soils Study, an Asbestos Survey, a Lead Paint Survey, and a Vapor Intrusion Risk Evaluation all prepared by *Krazan and Associates* from April to June 2015. Copies of these reports are attached as Appendix C.

4.8.1 Overview

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing and other uses. Determining if such substances are present on or near project sites is important because, by definition, exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology.

Due to the fact that these substances have properties that are toxic to humans and/or the ecosystem, there are multiple regulatory programs in place that are designed to minimize the chance for unintended releases and/or exposures to occur. Other programs set forth remediation requirements at sites where contamination has occurred.

Hazardous waste generators and hazardous materials users in the City are required to comply with regulations enforced by several Federal, State, and County agencies. The regulations are designed to reduce the risk associated with the human exposure to hazardous materials and minimize adverse environmental effects. State and Federal construction worker health and safety regulations require protective measures during construction activities where workers may be exposed to asbestos, lead, and/or other hazardous materials.

4.8.1 Existing Setting

The 1.86-acre project site is currently developed with a 65,000 square foot, three-story office building and a surface parking lot. The building is currently occupied. The project site is surrounded by residences to the south and west, an apartment complex, a school, and retail to the north, and an apartment building and commercial buildings to the east.

Based on topographic maps and data provided in the Phase I report, it is estimated that the direction of groundwater flow beneath the project site is north to northeast. Based on historic data, the groundwater depth on-site is estimated at 20 feet bgs.

4.8.1.1 Site History

A land use history of the site was compiled based on aerial photographs, topographic maps, building records, and City directories. Based on a review of these sources, as early as 1937, the project site was part of an orchard and operated as such through 1956. The site was vacant by 1961. In 1967, the current office building and parking lot were developed on-site. No significant changes have occurred on the project site since 1967.

The surrounding area was utilized as agricultural land from at least 1899 to 1956. Two roadways (Winchester Boulevard and Pruneridge Avenue) were present by 1953. From 1956 to approximately 1998, a small shopping plaza was developed at 200 Winchester Boulevard (immediately north of the project site) and various commercial, office, and residential uses was developed north of the project site. Aerial photographs depicted single-family and multi-family residences expanding west and south of the project site in the same time period. By 1974, the paint store at 690 Winchester Boulevard was developed. Santa Clara Fire Department records also identified a former automotive service station approximately 225 feet north of the project site (no longer existing). No significant changes in land use are shown in the 1998 to present day aerials.

4.8.1.2 On-Site Sources of Contamination

As noted above, the project was historically agricultural land and was developed with the current office building in 1967. Residual agricultural chemicals could remain in the native soils.

The date of construction of the two elevators in the office building is unknown (any time prior to 1998) and the last loading test for the elevators and associated equipment was 2009. Since the building was constructed in 1967, it is assumed that the elevators contain oils with biphenyl (PCB) in the hydraulic fluids, which was the standard practice prior to 1974. Surface staining from the hydraulic equipment was observed on-site. In addition, elevator operation permits expired in November 2014. Worn out elevator equipment, including ram seals, may have caused a release of hydraulic fluid into the soil on-site.

Asbestos and Lead Based Paint

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Non-friable ACMs are materials that contain a binder or hardening agent that does not allow the asbestos particles to become airborne easily. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl asbestos floor tiles, and transite is diding made with cement. Non-friable ACMs can pose the same hazard as friable asbestos during remodeling, repairs, or other construction activities that would damage the material. Use of friable asbestos products was banned in 1978. In the same year, the Consumer Products Safety Commission banned paint and other surface coating materials containing lead, a substance that is harmful to human health.

Because the existing building on-site was constructed prior to 1978, surveys were completed to determine the presence of ACMs and lead-based paint. Eighty-five samples of suspected ACMs were taken throughout the building. None of the samples collected contained detectable amounts of asbestos (i.e., more than one percent). Thirty-five samples of suspected lead-based paint were collected throughout the building. Nine of the samples (four interior and five exterior) contained more than 0.009 percent total lead (by weight) and were classified as lead-containing paint. None of the paint samples contained 0.5 percent or more of lead by weight.

¹⁶ Transite materials are manufactured from cement and ACM.

4.8.1.3 Off-Site Sources of Contamination

Review of the Environmental Database Resources (EDR) Report and various databases from State and local regulatory agencies¹⁷ found the presence of 25 listed hazardous waste sites within a mile radius of the project site. Of the recorded hazardous material sites, properties with known soils and/or groundwater releases that may impact the project site via groundwater are located within 528 feet (one-tenth mile) of the project site for petroleum hydrocarbon impacts or 1,760 feet (one-third mile) of the project site for other chemicals or substances. Based on the findings in the Phase I Environmental Site Assessment, off-site releases with petroleum hydrocarbons are the main concern for the project site. Generally, the concentration of contaminants in the groundwater would dissipate with distance and sources of hazardous materials beyond a tenth-mile radius would not result in significant adverse levels of contamination on the project site. Off-site hazardous materials sources within a one-tenth mile radius of the project site are listed in Table 4.8.1.

	TABLE 4.8-1						
	Hazardous I	Materials Sites Within ¹ / ₁₀ N	Mile Radius of Project Site				
	Dotobogo Ligting	Business Name and	Site Description				
	Database Listing	Site Address	Site Description				
1.	EDR US HIST	(Former Norment S. Union	Record shows a gas station on-site in 1966,				
		Service)	1970, and 1975.				
		199 N. Winchester Boulevard					
		0.028 miles N	No open violations.				
		down gradient					
2.	HIST UST	Deciduous Fruit Field Station	An agricultural research facility.				
		125 N. Winchester Boulevard	Three 1,000-gallon fuel tanks were removed				
		0.099 miles SE	between 1970 and 1978.				
		cross gradient					
			No open violations.				
3.	RCRA-SQG, FINDS	Walgreens	Small quantity generator.				
		200 N. Winchester Boulevard	Generates between 100 kg and 1,000 kg of				
		0.029 miles N	hazardous waste per month or less than five				
		down gradient	tons per year.				
			Contains flammable and corrosive hazardous				
			waste.				
			No open violations.				
4.	LUST, HIST LUST, CA	Mobil	Potential Contaminant of Concern: Kerosene.				
	FID UST, HIST UST,	230 N. Winchester Boulevard	The gas station received a case closure in 1998.				
	SWEEP UST, HIST	0.042 miles NE					
	CORTESE, EDR US	down gradient	No open violations.				
	HIST, Santa Clara Fire		·				
	Dept.						

⁻

¹⁷ Regulatory agencies include the Regional Water Quality Control Board, City of Santa Clara Fire Department, Santa Clara County Department of Environmental Health, State of California Department of Toxic Substances Control, Santa Clara Valley Water District, California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOMS), and Local Area Tribal Records)

	TABLE 4.8-1						
	Hazardous 1	Materials Sites Within ¹ / ₁₀ N	Mile Radius of Project Site				
	Database Listing	Business Name and Site Address	Site Description				
5.	CUPA, SAN JOSÉ HAZMAT, EDR US HIST	Goodyear Tire & Rubber Co. 486 N. Winchester Boulevard 0.082 miles SE cross gradient	The site is currently an auto service center. Generates between 100 kg to five tons of waste per year. No open violations.				
6.	RCRA-SQG, EDR US HIST	Krung Thai (Former ACC U Tune & Brake and Dowler S. Jim Flying A Service) 498 N. Winchester Boulevard 0.0796 miles SE cross gradient	Formerly a gas station (1966). The site is currently a restaurant. Generates between 100 kg and 1,000 kg of hazardous waste per month or less than five tons per year. No open violations.				
7.	RCRA-SQG, LUST, HIST LUST, HIST UST, SWEEPS UST, CUPA, SAN JOSÉ HAZMAT, FINDS, Geotracker	Dunn-Edwards 690 N. Winchester Boulevard 0.014 miles E down gradient	Small quantity generator. Generates between 100 kg and 1,000 kg of hazardous waste per month or less than five tons per year. A 10,000-gallon UST with paint thinner and a 110-gallon UST were removed in 1986 and 1991, respectively. Soil and groundwater remediation on-site. LUST case closure in 1998. Contains a "Notice of Environmental Restriction and Covent" to inform future prospect property owners of the environmental conditions that resulted from the paint thinner release.				
8.	LUST, HIST LUST, HIST CORTESE, EDR US HIST	Pierce Property 780 N. Winchester Boulevard 0.036 miles NE down gradient	Was formerly a gas station (1966-1970) LUST case closed in 1995. No open violations.				

Geotracker – Regional Water Quality Control Board's database

FINDS - Facility Index System. Sites investigated by EPA.

LUST – Leaking Underground Storage Tank

SAN JOSE HAZMAT-San José Hazardous Materials Facilities

RCRA – Resource Conservation and Recovery Act

SQG – Small Quantity Generator

SWEEPS UST – Statewide Environmental Evaluation and Planning System. Database is no longer updated.

HIST-historic databases that are no longer updated

EDR US HIST-EDR's High risk historic records

4.8.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wo	ould the project:					
3.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					1,2,3,12
4.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					1,2,3,12
5.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?					1,2,3
6.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?					12
7.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area?					1,2,3
8.	For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?					1,2,3
9.	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?					1,2,3
10.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?					1,2,3

4.8.2.1 On-Site Hazardous Materials Impacts

Agricultural Land Uses

The project site was used as agricultural land for at least 19 years (1937 – 1956) and developed with the current office building in 1967. It is common to find dichlorodiphenyltrichloroethane (DDT), arsenic, and lead residue in the native soils in Santa Clara County from historic farming operations.

Development of the proposed project would require demolition of the existing building and hardscape, as well as trenching for utilities and grading of the site. Currently, the site has approximately four inches of asphaltic concrete underlain by four inches of aggregate base. Beneath the pavement layers is a layer of engineered fill which varies from 2.5 to 6.5 feet in depth. The native soils are found beneath the fill. If trenching or grading were to extend to the depth of the native soil layers (approximately three to seven feet below the ground surface), construction of the proposed project could result in impacts to construction workers from exposure to soil contamination related to agricultural operations.

Impact HAZ-1: Implementation of the proposed project could expose construction workers to contaminated soil from historic agricultural uses. (Significant Impact)

Mitigation and Avoidance Measures

General Plan Policies

The policies of the City of Santa Clara General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Development under the proposed General Plan Amendment would be subject to existing General Plan policies, including those listed below.

Policy 5.10.5-P22: Regulate development on sites with known or suspected contamination of soil and/or groundwater to ensure that construction workers, the public, future occupants and the environment are adequately protected from hazards associated with contamination, in accordance with applicable regulations.

Policy 5.10.5-P23: Require appropriate clean-up and remediation of contaminated sites.

Project Specific Mitigation

The project proposes to implement the following mitigation measures in areas where trenching or grading activities will expose the native soils layers:

MM HAZ-1.1:

Prior to the issuance of grading permits, soil samples shall be taken to determine if contaminates from previous agricultural operations are located on-site in concentrations above established construction worker and residential thresholds. The soil sampling plan must be reviewed and approved by the Santa Clara Fire Chief prior to initiation of work.

MM HAZ-1.2:

For soil assessment of prior site agricultural use, native soil samples collected from the approximate surface of the native soil, to a 0.5 foot depth, shall be analyzed for organochlorine pesticides and pesticide related metals (e.g. arsenic, lead, and mercury). The soil sampling results will be compared to appropriate risk-based screening levels (i.e., construction workers and senior residents) and submitted to the Santa Clara County Department of Environmental Health (SCCDEH) and the City's Director of Planning and Inspection for review prior to issuance of grading permits. If concentrations are found above risk-based screening levels to a depth of 0.5 feet, additional sampling will be required to the depth of excavation for utilities and building foundations.

MM HAZ-1.3:

If contaminated soils are found in concentrations above established thresholds for construction worker and/or residential safety¹⁸, a Site Management Plan (SMP) will be prepared and implemented (as outlined below) and any contaminated soils found in concentrations above established thresholds shall be removed and disposed of according to California Hazardous Waste Regulations. The contaminated soil removed from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.

An SMP will be prepared to establish management practices for handling impacted soil material that may be encountered during site development and soil-disturbing activities. Components of the SMP will include: a detailed discussion of the site background; preparation of a Health and Safety Plan by an industrial hygienist; notification procedures if previously undiscovered significantly impacted soil is encountered during construction; on-site soil reuse guidelines based on the California RWQCB, San Francisco Bay Region's reuse policy; sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility; a dust control plan; and soil stockpiling protocols. Prior to issuance of grading permits, a copy of the SMP must be approved by the SCCEHD, the City's Director of Planning and Inspection, and the Santa Clara Fire Chief.

Implementation of the identified mitigation measures would reduce the risk of construction worker exposure to contaminated soils from historic agricultural uses to a less than significant level. (Less Than Significant Impact With Mitigation)

Existing Office Building – Elevators

Elevators in the existing office building were built prior to 1974 and would likely have PCBs in the hydraulic fluid system. The elevators and associated equipment have not been tested for loading weight since 2009 and the operation permits expired in November 2014. A recent survey of the site

¹⁸ Residential thresholds are more stringent than construction worker thresholds and will be used as the baseline for all testing.

documented soil and ground stains near the elevators. With more than 40 years of operation, the elevator system is likely worn out and hydraulic fluids may have leached into the soil.

Impact HAZ-2:

Implementation of the proposed project could expose construction workers and future residents to contaminated soil from leaking hydraulic fluid from the existing elevators and associated equipment. (**Significant Impact**)

Mitigation and Avoidance Measures

General Plan Policies

The policies of the City of Santa Clara General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Development under the proposed General Plan Amendment would be subject to existing General Plan policies, including those listed under **Impact HAZ-1**.

Project Specific Mitigation

The project proposes to implement the following mitigation measures:

MM HAZ-2.1:

Prior to the issuance of grading permits, soil samples shall be taken in the location of the elevator equipment room, subsurface hydraulic fluid piping, and elevator rams to determine if contaminated soil from elevator use (including hydraulic fluids and PCBs) is located on-site and, if there is soil contamination, if the concentrations are above established construction worker and residential thresholds. The soil sampling plan must be reviewed and approved by the Santa Clara Fire Chief prior to initiation of work.

MM HAZ-2.2:

The soil sampling results will be compared to appropriate risk-based screening levels (i.e., construction workers and senior residents) and submitted to the Santa Clara County Department of Environmental Health (SCCDEH) and the City's Director of Planning and Inspection for review prior to issuance of grading permits.

MM HAZ-2.3:

If contaminated soils are found in concentrations above established thresholds for construction worker and/or residential safety¹⁹, a Site Management Plan (SMP) will be prepared and implemented (as outlined below) and any contaminated soils found in concentrations above established thresholds shall be removed and disposed of according to California Hazardous Waste Regulations. The contaminated soil removed from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.

¹⁹ Residential thresholds are more stringent than construction worker thresholds and will be used as the baseline for all testing.

An SMP will be prepared to establish management practices for handling impacted soil material that may be encountered during site development and soil-disturbing activities. Components of the SMP will include: a detailed discussion of the site background; preparation of a Health and Safety Plan by an industrial hygienist; notification procedures if previously undiscovered significantly impacted soil is encountered during construction; on-site soil reuse guidelines based on the California RWQCB, San Francisco Bay Region's reuse policy; sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility; a dust control plan; and soil stockpiling protocols. Prior to issuance of grading permits, a copy of the SMP must be approved by the SCCEHD, the City's Director of Planning and Inspection, and the Santa Clara Fire Chief.

Implementation of the identified mitigation measures would reduce the risk of construction worker and resident exposure to contaminated soils from the elevators to a less than significant level. (Less Than Significant Impact With Mitigation)

Asbestos and Lead-Based Paint

Based on the Asbestos Survey completed on the project site, no ACMs were found containing more than one percent asbestos. Due to the age of the structure on the project site, however, it is possible that ACMs may be present which were not identified during the survey. NESHAP guidelines require that all potentially friable ACM be removed prior to building demolition or renovation that may disturb the ACMs. The NESHAP definition of regulated asbestos-containing materials includes:

- Friable materials containing more than one percent asbestos;
- Category I non-friable materials containing more than one percent asbestos that have become friable, or have been subjected to or will be subjected to sanding, grinding, cutting, or abrading; or
- Category II non-friable materials containing more than one percent asbestos that have the high
 probability of becoming or have already been reduced to a friable condition by demolition or
 renovation activities.

Based on the Lead-Based Paint Survey, lead was found above reporting limits. It will be necessary for the project to follow the requirements outlined by Cal-OSHA Lead in Construction Standard, Title 8, California Code of Regulation (CCR) 1532.1 during demolition activities. These requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it should be removed prior to demolition. It is assumed that such paint will become separated from the building components during demolition activities and must be managed and disposed of as a separate waste stream. Any debris or soil containing lead paint or coating must be disposed of at landfills that are permitted to accept such waste.

Demolition of the existing building and accessory structures on-site could expose construction workers to harmful levels of ACMs or lead.

The project is required to conform to the following regulatory programs and implement the following standard measures to reduce impacts due to the presence of ACMs and/or LBP:

- In conformance with State and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site buildings to determine the presence of asbestos-containing materials and/or lead-based paint.
- Prior to demolition activities, all building materials containing lead-based paint shall be removed
 in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code
 Regulations 1532.1, including employee training, employee air monitoring, and dust control.
 Any debris or soil containing lead-based paint or coatings would be disposed of at landfills that
 meet acceptance criteria for the waste being disposed.
- All potentially friable ACMs shall be removed in accordance with NESHAP guidelines prior to
 any building demolition or renovation that may disturb the materials. All demolition activities
 will be undertaken in accordance with Cal/OSHA standards contained in Title 8 of CCR, Section
 1529, to protect workers from exposure to asbestos.
- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one percent asbestos are also subject to Bay Area Air Quality
 Management District (BAAQMD) regulations. Removal of materials containing more than one
 percent asbestos shall be completed in accordance with BAAQMD requirements.

Conformance with the aforementioned regulatory requirements will result in a less than significant impact from ACMs and lead. (Less Than Significant Impact)

Future Operations

The proposed two residential buildings would likely include the use and storage on-site of cleaning supplies and maintenance chemicals in small quantities. No other hazardous materials would be used or stored on-site. The small quantities of cleaning supplies and maintenance chemicals that would be used on-site would not pose a risk to future residences or adjacent land uses. (Less Than Significant Impact)

4.8.2.2 Off-Site Hazardous Materials Impacts

Soil and Groundwater

Within a tenth-mile radius of the project, the Phase I ESA identified eight hazardous material sources. Of the eight, five sources are located down gradient from the project site and have no open violations. Any potential residual contaminants in the soil or groundwater from these sources would not likely affect the soil and groundwater on the project site.

Three hazardous materials sites are located cross gradient from the project including a restaurant (formerly a gas station located at 498 North Winchester Boulevard), an auto service center (498 North Winchester Boulevard), and an agricultural research facility (125 North Winchester Boulevard). The agricultural research facility, approximately 525 feet from the project site, removed three 1,000-gallon USTs of fuel by 1978 and has no record of releases on-site. The former gas station and existing auto service center are located approximately 420 feet and 433 feet southeast of the project and have no records of hazardous releases. Any residual concentration of contaminants from these three facilities that could migrate to the project site via groundwater would have dissipated with distance. Furthermore, construction workers and future maintenance workers would not encounter groundwater on-site, which is approximately 20 feet bgs. Therefore, implementation of the proposed project would not result in a significant hazardous materials impact from off-site hazardous materials sources. (Less Than Significant Impact)

Vapor Intrusion

The paint store at 690 North Winchester Boulevard had a 10,000-gallon UST that stored paint thinner and a 110-gallon UST with detected paint thinner residuals which were removed in 1986 and 1991, respectively. Site remediation began in 1992 to remove contaminated soil and approximately 7,000 gallons of groundwater. Soil samples detected paint thinner concentrations as high as 22,000 milligram per kilogram (mg/kg) on-site. Although the site received a case closure in 1998, pockets of petroleum hydrocarbon concentrations from the paint thinner remain in the sandy soil and the groundwater beneath the site.

Records from the Santa Clara Fire Department identified past fuel storage leaks at the former Mobil service station (230 North Winchester Boulevard) that contaminated the soil and groundwater on-site with petroleum hydrocarbons. In 1989, three USTs with fuel and one UST with waste oil were removed from the site as part of remediation activities. Soil samples near the former fuel tanks detected petroleum hydrocarbon concentrations as high as 11,000 mg/kg and up to 25 feet bgs. Soil testing near the former UST with waste oil showed no detectable concentrations of contaminants.

Although the groundwater at the paint store and former gas station is down gradient from the project site, vapors can migrate in multiple directions though various pathways such as infrastructure trenches. As a result, there is a potential for vapor intrusion into structures on the project site. In April 2015, eight soil vapor samples were taken on-site (up to five feet bgs) and tested for volatile organic compounds (VOCs). The testing found concentrations of Benzene, Tetrachloroethene (PCE), and Trichloroethene (TCE) exceeded the environmental screening levels (ESLs) for residential uses. A Vapor Intrusion Risk Evaluation (VIRE) was then completed for the project site

on June 26, 2015 to assess if the VOCs in the soil vapor beneath the project site would exceed the ESLs for residential uses once the proposed residential development is constructed.

Consistent with Department of Toxic Substances Control (DTSC), the Johnson and Ettinger (J&E) model (1991) was used to estimate the potential migration of VOC vapors into indoor air in the worst case scenario. The model utilizes data from the eight soil borings and assumes that soil vapor would migrate through cracks in the building foundation and would mix with the indoor air. Sample testing showed exposure from indoor air ranged from 0.03 to 0.2. In accordance with DTSC guidelines, a hazard index of less than 1.0 does not pose a human health risk. The findings of the VIRE indicated that chemicals detected on-site were not carcinogenic and that the soil vapor concentration levels would not pose a health risk to on-site workers or future occupants. (Less Than Significant Impact)

4.8.2.3 Other Hazards

The project site is not located within a quarter mile of any schools except for a private education center for students with autism immediately north of the site. The project does not propose the use or handling of any hazardous materials that would pose significant hazards to offsite receptors. Therefore, implementation of the proposed project would not result in a significant hazardous materials impact to schools in the project area. (**No Impact**)

The project site is not located near any private air strip. Although the nearest public airport (Mineta San José International Airport) is approximately 1.8 miles northeast of the project site, the site is outside the Airport Influence Area. Therefore, implementation of the proposed project would not result in safety hazard impacts due to airport activities. (**No Impact**)

The project site is in a highly developed urban area, and it is not adjacent to any wildland areas that would be susceptible to fire. Therefore, the proposed project would not expose the proposed buildings and future site users to wildland fires. (**No Impact**)

The City's public safety departments have evaluated the proposed project design and operations and determined that the project would not interfere with any adopted emergency response plan or emergency evacuation plan. (**Less Than Significant Impact**)

4.8.3 Conclusion

With conformance to regulatory requirements and implementation of the proposed mitigation measures, the project would not result in significant impacts related to hazardous materials. (Less Than Significant Impact With Mitigation)

4.9 HYDROLOGY AND WATER QUALITY

The following discussion is based, in part, on a Preliminary Drainage Study and a Preliminary Stormwater Management Plan prepared by *Rick Engineering Company* in June 2015. Copies of the reports are attached in Appendices D and E, respectively.

4.9.1 Setting

4.9.1.1 Flooding

The project site is not located within a 100-year flood hazard area. According to the Federal Emergency Management Agency (FEMA), the project site is located in Zone X which is an area with 0.2 percent annual chance of flood; areas with one percent chance of annual flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from one percent annual flood.

4.9.1.2 Dam Failure

Based on the Santa Clara Valley Water District dam failure inundation hazard maps, eastern sections of the Santa Clara Valley are located in the Andersen dam failure inundation hazard zone, including the project site.²⁰ The project site is located over 18 miles from Anderson Reservoir.

4.9.1.3 Seiches, Tsunamis, and Mudflows

There are no landlocked bodies of water near the project site that would affect the site in the event of a seiche. There are no bodies of water near the project site that would affect the site in the event of a tsunami.²¹ The project area is flat and there are no mountains near the site that would affect the site in the event of a mudflow.

4.9.1.4 Storm Drainage System

The City of Santa Clara owns and maintains the municipal storm drainage system which serves the project area. The lines that serve the project area drain into San Tomas Aquino Creek which flows north, carrying the runoff from the storm drains into San Francisco Bay.

Currently, 90 percent of the project site is covered with impervious surfaces. A 24-inch storm drain line in Winchester Boulevard serves the project site.

²⁰ Santa Clara Valley Water District. Andersen Dam EAP 2009 Flood Inundation Maps. 2009.

http://www.valleywater.org/uploadedFiles/Services/CleanReliableWater/WhereDoesYourWaterComeFrom/Reservoirs/Anderson_Dam/Anderson%20Inundation%20Maps%202009.pdf?n=6912 Accessed June 19, 2015.

²¹ Association of Bay Area Governments. *Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region*. 2009. http://quake.abag.ca.gov/tsunamis. Accessed July 22, 2015.

4.9.1.5 Groundwater

Historic data in the project area estimated groundwater to be approximately 20 feet bgs. The project site is developed in a confined area of the Santa Clara Valley groundwater basin and does not substantially contribute to the recharging of the groundwater aquifer used for water supply.²²

4.9.1.6 Water Quality Regulatory Setting

As stated above, stormwater from the project site drains into San Tomas Aquino Creek. The water quality of San Tomas Aquino Creek is directly affected by pollutants contained in stormwater runoff from a variety of urban and non-urban uses. Stormwater from urban uses contains metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes.

Nonpoint Source Pollution Program

The Federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA's regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the water quality control boards, which for the Santa Clara area is the San Francisco Regional Water Quality Control Board (RWQCB). Based on data from the Environmental Protection Agency (EPA),²³ San Tomas Aquino Creek is not currently listed on the California 303(d) list²⁴ or the Total Maximum Daily Load (TMDL) high priority schedule.²⁵

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction.

Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirement

The San Francisco Bay RWQCB also has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP). In an effort to standardize stormwater management requirements throughout the region, this permit replaces the formerly separate countywide municipal

²² Santa Clara Valley Water District. 2012 Groundwater Management Plan. Figure 2-5 Santa Clara Groundwater Subbasins.

²³ United States Environmental Protection Agency. California 303(d) Listed Waters.

 $< http://ofmpub.epa.gov/tmdl_waters10/attains_impaired_waters.impaired_waters_list?p_state=CA\&p_cycle=2006> Accessed July 13, 2015.$

²⁴The Clean Water Act, section 303, establishes water quality standards and TMDL programs. The 303(d) list is a list of impaired water bodies.

²⁵ A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards.

stormwater permits with a regional permit for 77 Bay Area municipalities, including the City of Santa Clara. Under provisions of the NPDES Municipal Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. Amendments to the MRP require all of the post-construction runoff to be treated by using Low Impact Development (LID) treatment controls, such as biotreatment facilities. The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) assists co-permittees, such as the City of Santa Clara, with implementing the provisions of the Municipal NPDES Permit.

Hydromodification (Subset of MRP)

In addition to water quality controls, the Municipal Regional Stormwater NPDES permit requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in subwatersheds or catchments areas that are greater than or equal to 65 percent impervious (per the Santa Clara Permittees Hydromodification Management Applicability Map).

Based on the SCVUPPP Watershed Map for the City of Santa Clara, the project site is within a subwatershed that drains into a hardened channel or tidal area. As a result, the project is not subject to the NPDES hydromodification peak runoff requirements.²⁶

4.9.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wo	ould the project:					
1.	Violate any water quality standards or waste discharge requirements?					1,2,3,13
2.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?					1,2,3,13

²⁶ Santa Clara Valley Urban Runoff Pollution Prevention Program. http://www.scvurppp-w2k.com/hmp_maps.htm Accessed July 13, 2015.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wo	ould the project:	_	_	_		
3.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?					1,2,3
4.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?					1,2,3
5.	Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?					1,2,3,13, 14
6.	Otherwise substantially degrade water quality?					1,2,3
7.	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?					1,2,3,13
8.	Place within a 100-year flood hazard area structures which will impede or redirect flood flows?					1,2,3,13
9.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?					1,2,3,13, 15
10.	Inundation by seiche, tsunami, or mudflow?				\boxtimes	1,2,3,16

4.9.2.1 Storm Drainage Impacts

Development of the project would result in the disturbance of approximately 1.86 acres of soil on the project site. With implementation of the proposed project, the amount of impermeable surface area on the project site would incrementally decrease compared to the existing site conditions. The existing and proposed pervious and impervious surfaces on the project site are shown in Table 4.9-1 below.

TABLE 4.9-1 Pervious and Impervious Surfaces On-Site											
Site Surface	Existing/Pre- Construction (sf)	%	Project/Post- Construction (sf)	%	Difference (sf)	%					
Impervious				•							
Building Footprint	40,410	50	46,823	58	+6,413	+8					
Sidewalks, Parking, and Hardscapes	32,965	40	25,426	31	-7,539	-9					
Subtotal	73,375	90	72,249	89	-1,126	-1					
Pervious				•							
Pervious Pavement and Landscaping	7,782	10	8,908	11	+1,126	+1					
TOTAL	81,157	100	81,157	100							

Under existing conditions, the storm drainage system has sufficient capacity to convey runoff from the site. The proposed development would result in a one percent (1,126 sf) decrease in impervious surface area on-site. The net reduction in impervious surface area on-site would ensure that runoff from the project site would be less than existing conditions and the project would not, therefore, exceed the capacity of the local drainage system. (Less Than Significant Impact)

4.9.2.2 Flooding Impacts

Based on the FEMA flood insurance rate map, the site is not located within a 100-year flood hazard zone. Therefore, implementation of the proposed project would not result in people or structures being exposed to significant flood risks. (**Less Than Significant Impact**)

4.9.2.3 Groundwater Supplies and Quality Impacts

The project site is currently 90 percent paved, located within a confined area of the groundwater basin, and does not contribute to recharging of the groundwater aquifers used as water supply. The depth to groundwater at the project site is 20 feet bgs. Development of the project would include trenching for utilities, but would not have any substantial excavations that would extend to the groundwater depth of 20 feet bgs, and as a result, the project would not interfere with groundwater flow or expose any aquifers. (Less Than Significant Impact)

4.9.2.4 Water Quality Impacts

Construction Impacts

Implementation of the proposed project would require demolition of the existing building and pavement and grading of the site. These construction activities could degrade water quality in San Tomas Aquino Creek because the existing on-site storm drainage system discharges directly into this waterway. Construction activities would generate dust, sediment, litter, oil, paint, and other pollutants that would temporarily contaminate runoff from the site.

Impact HYD-1: Construction activities could temporarily increase pollutant loads in stormwater runoff. (Significant Impact)

Mitigation and Avoidance Measures

General Plan Policies

The policies of the City of Santa Clara General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Development under the proposed General Plan Amendment would be subject to existing General Plan policies, including those listed below:

- 5.10.4-P12: Encourage diversion of run-off from downspouts, and replacement of hardscapes to landscaped areas and permeable surfaces.
- 5.10.5-P16: Require new development to implement erosion and sedimentation control measures to maintain an operational drainage system, preserve drainage capacity and protect water quality.
- 5.10.5-P17: Require that grading and other construction activities comply with the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures and with the California Stormwater Quality Association (CASQA), Stormwater Best Management Practice Handbook for Construction.

The following project-specific measures, based on RWQCB BMPs, have been included in the project to reduce construction-related water quality impacts. All mitigation measures would be implemented prior to the start of earthmoving activities on-site and would continue until the completion of construction activities.

MM HYD-1.1:	Burlap bags filled with drain rock shall be installed around storm drains to
	route sediment and other debris away from the drains.

- MM HYD-1.2: Earthmoving or other dust-producing activities shall be suspended during periods of high winds.
- MM HYD-1.3: All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary.
- **MM HYD-1.4:** Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered.
- MM HYD-1.5: All trucks hauling soil, sand, and other loose materials shall be required to cover all trucks or maintain at least two feet of freeboard.
- MM HYD-1.6: All paved access roads, parking areas, staging areas, and residential streets adjacent to the construction sites shall be swept daily (with water sweepers).

MM HYD-1.7: Vegetation in disturbed areas shall be replanted as quickly as possible.

MM HYD-1.8: All unpaved entrances to the site shall be filled with rock to knock mud from

truck tires prior to entering City streets. A tire wash system may also be

employed at the request of the City.

MM HYD-1.9: A Stormwater Permit will be administered by the RWQCB. Prior to

construction grading for the proposed land uses, the project proponent will file a "Notice of Intent" (NOI) to comply with the General Permit and prepare a SWPPP which addresses measures that would be included in the project to minimize and control construction and post-construction runoff. Measures will include, but are not limited to, the aforementioned RWQCB mitigation.

MM HYD-1.10: The project proponent will submit a copy of the draft SWPPP to the City of

Santa Clara for review and approval prior to start of construction on the project site. The certified SWPPP will be posted at the project site and will

be updated to reflect current site conditions.

MM HYD-1.11: When construction is complete, a NOT for the General Permit for

Construction will be filed with the RWQCB and the City of Santa Clara. The NOT will document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a post-construction stormwater management plan is in place as described in the

SWPPP for the site.

With implementation of the above mitigation measures, the proposed project would result in a less than significant water quality impact related to construction activities. (Less Than Significant Impact With Mitigation)

Operational Impacts

Implementation of the proposed project would result in an overall reduction in stormwater runoff due to an approximately one percent decrease in impermeable surfaces over existing conditions. Once redeveloped, the project site would contribute the same types of stormwater runoff pollutants as the current site conditions and the surrounding development. Runoff from streets and parking areas often carries grease, oil, and trace amounts of heavy metals into natural drainages. Runoff from landscaping can carry pesticides, herbicides, and fertilizers. Although the amounts of these pollutants ultimately discharged into the waterways are unknown, over time they could accumulate and be substantial.

The existing and proposed square footages of pervious and impervious surfaces are shown on Table 4.9-1, above. The existing project site is approximately 81,157 sf, of which approximately 90 percent (73,375 sf) is currently comprised of impervious surfaces. The proposed project would decrease impervious surfaces on-site by approximately one percent (1,126 sf). The reduction in

impervious surface area would incrementally decrease the amount of oils, grease, metals, and debris on-site flowing into the storm drainage system.

Although the amount of pollutants in the storm drainage system would decrease, the proposed project would add or replace more than 10,000 square feet of impervious surfaces, so it must conform to the requirements of the NPDES Municipal Regional permit. Conformance is illustrated in the project's Conceptual Stormwater Control Plan (SWCP) and would be finalized in the final Stormwater Control Plan at the Development Permit stage of this project. Plans would be certified by engineers to ensure incorporation of appropriate and effective source control measures to meet Low Impact Development (LID) requirements to prevent discharge of pollutants, reduce impervious surfaces, retain a percentage of runoff on-site for percolation, and treatment control measures to remove pollutants from runoff entering the storm drainage system. In order to meet the City's and the NPDES requirements, the project proposes that pathways, parking areas, and rooftop runoff would drain into bio-retention areas and flow-through planters located within parking areas and throughout the site.

The proposed treatment facilities would be numerically sized to ensure sufficient capacity to treat the stormwater runoff entering the storm drainage system. In addition, the project would be required to maintain all post-construction treatment control measures, as outlined below, throughout the life of the project.

The following measures, based on the RWQCB Best Management Practices (BMPs) and the City requirements, are included in the project as a condition of project approval to ensure compliance with NPDES permit requirements to reduce post-construction water quality impacts.

- When the construction phase is complete, a Notice of Termination (NOT) for the General Permit for Construction will be filed with the RWQCB and the City of Santa Clara. The NOT will document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a post-construction stormwater management plan is in place as described in the SWPPP for the project site.
- All post-construction Treatment Control Measures (TCMs) will be installed, operated, and
 maintained by qualified personnel. On-site inlets will be cleaned out at a minimum of once per
 year, prior to the wet season.
- The property owner/site manager will keep a maintenance and inspection schedule and record to
 ensure the TCMs continue to operate effectively for the life of the project. Copies of the
 schedule and record must be provided to the City upon request and must be made available for
 inspection on-site at all times.

With implementation of the project's SWCP, the project would not violate any adopted water quality standards or waste discharge requirements. Runoff would be routed directly from the treatment facilities to the storm drainage system and would not flow off-site. Installation and maintenance of the proposed stormwater treatment systems would result in a less than significant impact on water quality. (Less Than Significant Impact)

4.9.2.5 Inundation and Dam Failure Impacts

Due to the location of the project site, a relatively flat urbanized area not in proximity to any waterways, the project would not be subject to inundation by seiche, tsunami, or mudflow. (No Impact)

Although the project site is located within the Andersen Reservoir dam failure inundation hazard zone, the site is located over 18 miles from the Andersen Reservoir. The SCVWD maintains and inspects the dam at the reservoir and provides an annual report of the reservoir's condition. As a result, the probability of a dam failure is very low. Implementation of the project would not expose people or structures to significant flooding risks due to dam failure. (Less Than Significant Impact)

4.9.3 <u>Conclusion</u>

The project would not be subject to inundation by seiche, tsunami, or mudflow. (No Impact)

The project would not expose people or structures to significant flooding risks due to dam failure. (Less Than Significant Impact)

The project would comply with the Nonpoint Source Pollution Program and the Municipal Regional Stormwater Permit and therefore, would not violate any water quality standards or waste discharge requirements. (Less Than Significant Impact)

The project would decrease stormwater runoff from the site. With implementation of the project's SWCP, the project would not result in substantial erosion or siltation on-site (or in local waterways) or degraded water quality. (Less Than Significant Impact)

The project does not contribute to the recharging of groundwater aquifers, and there are no groundwater recharge sources in the project area. In addition, the project would not deplete the groundwater supply or expose people or structures to flood hazards such as dam failure. (Less Than Significant Impact)

While construction activities could temporarily increase pollutants loads in stormwater runoff, implementation of the identified mitigation measures would reduce construction-related impacts to water. (Less Than Significant Impact With Mitigation)

4.10 LAND USE

4.10.1 Setting

4.10.1.1 Project Site

The project site is a relatively flat 1.86-acre parcel. The project site is currently developed with a three-story, 65,000 sf office building. The site is landscaped with grass, trees, and shrubs along the boundaries of the site and within the atrium of the office building. The project site is accessible from two ingress/egress driveways on Winchester Boulevard. At three stories, the existing office building is the tallest building in the immediate project area. Refer to Figure 2.2-3, which shows an aerial photograph of the project site and surrounding land uses.

4.10.1.2 Surrounding Land Uses

The project site is located west of Winchester Boulevard, near the southwest corner of the Winchester Boulevard/Pruneridge Avenue-Hedding Street intersection. Adjacent to the project site, Winchester Boulevard is a four-lane roadway with a center median lane. Approximately eight-foot sidewalks are on both sides of the roadway.

East of Winchester Boulevard is a mix of one- and two-story older commercial buildings (including a paint store and office building) and a small apartment building. South and west of the project site is a single-family neighborhood. Some of the residences on the north side of Fernwood Avenue and the east side of Jill Drive share a property line with the project site. North of the project site is a mix of commercial, residential, and institutional land uses. The project site shares a property line with a retail store, a small apartment complex, and an office building currently occupied by a special education school. Both the school and apartment complex are set back from the shared property line by surface parking lots.

4.10.1.3 Existing Land Use Designation and Zoning

The *Regional Commercial* General Plan designation is intended for commercial developments that serve the residents of Santa Clara and the surrounding region. The designation permits a variety of retail uses including regional shopping centers, local-serving offices, medical facilities, home improvement/durable goods sales and services, warehouse membership clubs, new and used auto sales and services, and travel-related services such as hotels, gas stations, restaurants, convention centers, amusement parks and sports venues.

The *OG – General Office* zoning district (Chapter 18.32 of the City Code) is intended for development of administrative facilities and business office centers. The zoning district is typically near or located within a business or community/regional commercial area. Permitted uses range from banks, restaurants, financial and general business offices, lodges and clubs, and instructional facilities (i.e., dance or music studios).

4.10.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
W	ould the project:					
1.	Physically divide an established community?			\boxtimes		1,2,3
2.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?					1,2,3
3.	Conflict with any applicable habitat conservation plan or natural community conservation plan?					1,2,3

4.10.2.1 Land Use Impacts

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances are aspects of *land use compatibility*. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impacts and their severity, land use compatibility conflicts can range from minor irritation and nuisance to potentially significant effects on human health and safety. The discussion below distinguishes between potential impacts from the proposed project upon persons and the physical environment, and potential impacts from the project's surroundings upon the project itself.

Land Use Compatibility

Changes in land use are not adverse environmental impacts in and of themselves, but they may create conditions that adversely affect existing uses in the immediate vicinity. The proposed project is a residential project located within an existing residential/commercial neighborhood. This area is characterized by single-family and multi-family housing, as well as small commercial businesses. The project, as proposed, is not consistent with the General Plan but is generally consistent with the existing land uses in the immediate project area. The General Plan FEIR concluded that land use conflicts, including impacts to adjacent residential development and existing businesses, can be substantially limited or precluded with implementation of applicable General Plan policies and actions for planning and implementation as well as conformance with identified ordinances and adopted design guidelines. The proposed project will comply with all applicable City policies, actions and ordinances, and will be consistent with adopted design guidelines. Therefore, the

proposed project would have a less than significant compatibility impact on surrounding land uses. (Less Than Significant Impact)

General Plan and Zoning Consistency

As stated in *Section 4.10.1.3*, the project site is designated *Regional Commercial* under the City's General Plan. The intent of this designation is a variety of commercial developments. The proposed project would develop two residential buildings with up to 92 housing units on-site and, therefore, it is not consistent with the current General Plan designation. The project proposes a General Plan Amendment to *High Density Residential* for the site, which will allow residential uses with a density of 37 to 50 units per gross acre and is typically intended for areas adjacent to major transportation corridors, transit, or mixed uses. The proposed project would result in 50 dwelling units per acre, consistent with the proposed General Plan Amendment.

The *OG – General Office* zoning district is intended for heavy employment developments such as business office centers and administrative facilities and does not allow residential development. The City's Zoning Code currently does not have a zoning district consistent with the proposed *High Density Residential* General Plan designation. Therefore, the project proposes to rezone the site to *Planned Development (PD)*.

With the City's approval of a General Plan Amendment to *High Density Residential* and a *Planned Development* rezoning, the project would be consistent with the General Plan designation and Zoning Code and as a result, would not conflict with any land use plans or policies. (**Less Than Significant Impact**)

Visual Intrusion

Visual intrusion addresses the general concern that windows or balconies from taller buildings will provide visual access to neighboring yards and windows of private residences. The existing building on the project site is a three-story commercial building with windows that face to the residential neighborhood. The new two- to four-story residential buildings would also have windows on all four sides of the structures.

In urban built-out environments properties are in close proximity to one another and complete privacy is not typical. Nevertheless, implementation of the proposed project would create the possibility of visual intrusion from the project site on the adjacent residential properties, though the issue already exists under current conditions.

The existing building is located approximately five feet from the southern property line. As proposed, the residential buildings would be set back a minimum of 47.6 feet from the southern property line.

The existing building is set back approximately 150 feet from the western property line. The proposed residential buildings would reduce the setback to 20 feet. The building nearest the western property line will, however, step down from four to two stories as it nears the property line. The portion of the building nearest the adjacent residences would be two stories (approximately 24.5

feet). The building would increase in height to three stories approximately 54 feet from the property line.

The project design would limit visual intrusion, as noted above, with increased setbacks from the southern property line and height limitations near the western property line. The line of sight from the residential buildings will be further obscured by the existing mature trees on the adjacent properties and the planting of new trees along the project boundaries. As a result of the setback, building height restrictions, and landscaping, the proposed project will have a less than significant visual intrusion impact. (Less Than Significant Impact)

Shade and Shadow Effects

The proposed two residential buildings would be up to four stories tall with a maximum height of 45 feet to the roofline. The building would be set back a minimum of 46.7 feet from residences south of the project site, 20 feet from residences west of the project site, and 10 feet from the education center, two-story apartment complex, and commercial plaza north of the project site.

To determine the specific shading of the proposed residential buildings on the surrounding land uses, a shade and shadow analysis was completed by the project architect (see Figures 4.10-1, 4.10-2, and 4.10-3). Shade and shadow analyses are typically prepared for March 20, June 20, September 22, and December 21. This provides an analysis of each season as well as the longest and shortest days of the year, covering the full spectrum of possible shade and shadow issues. Consistent with standard practices, for each day the analysis provides data for 9:00 am, 12:00 pm, and 3:00 pm.

Results of the shade and shadow analysis show that the project would primarily shade the backyards of adjacent residential properties to the west, the parking lot and outdoor recreation area of the education center, the parking lot of the two-story apartment complex, and the southern portion of the convenience store with a pharmacy to the north in the morning hours during the winter. Around noon in the winter, the proposed residential development would shade portions of the adjacent northern properties, primarily the parking lots, outdoor areas, and the convenience store. By the afternoon hours during the winter, one residential building at the apartment complex, the convenience store building, and portions of Winchester Boulevard would be shaded by the proposed project.

During the summer, spring, and fall, shadows from the proposed buildings would slightly extend beyond the boundaries of the project site to the north and east, covering the parking lots on the adjacent properties as well as a portion of the convenience store. There are no existing solar collectors on the roofs of houses on adjacent residential properties that would be impacted by shading from the project.

Because shading from the project would not occur year-round and would not substantially impair the beneficial use of adjacent parcels by the residents, the proposed project would not result in significant shade or shadow impacts. (**Less Than Significant Impact**)



DECEMBER 21 AT 9:00 AM



JUNE 21 AT 9:00 AM



MARCH 21 AT 9:00 AM



SEPTEMBER 21 AT 9:00 AM



DECEMBER 21 AT 12:00 PM



JUNE 21 AT 12:00 PM



MARCH 21 AT 12:00 PM



SEPTEMBER 21 AT 12:00 PM



DECEMBER 21 AT 3:00 PM



JUNE 21 AT 3:00 PM



MARCH 21 AT 3:00 PM



SEPTEMBER 21 AT 3:00 PM

Established Communities

The proposed project is a residential development within a primarily residential neighborhood with a few commercial businesses. Therefore, the project will not physically divide an established community. (**No Impact**)

Conservation Plans

The proposed residential development would be constructed on a developed site and would not conflict with any habitat conservation plan or natural community conservation plan. (**No Impact**)

4.10.3 <u>Conclusion</u>

The project would not divide an established community. (Less Than Significant Impact)

The project would not conflict with any habitat conservation plans. (No Impact)

Implementation of the proposed project would not result in significant land use impacts. (**Less Than Significant Impact**)

4.11 MINERAL RESOURCES

4.11.1 Setting

The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Mt. Hamilton-Diablo Range were exposed by continued tectonic uplift and regression of the inland sea that had previously inundated this area. As a result of this process, the topography of the area is relatively flat and there are no mapped mineral resources in the project vicinity.²⁷

4.11.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:1. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?					1,2,3
2. Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?					1,2,3

4.11.2.1 Mineral Resources Impacts

The proposed project site is within a developed urban area and it does not contain any known or designated mineral resources. (**No Impact**)

4.11.3 Conclusion

The project would not result in a significant impact from the loss of availability of a known mineral resource. (**No Impact**)

²⁷ Stanley, R. G., R. C. Jachens, P. G. Lillis, R. J. McLaughlin, K. A. Kvenvolden, F. D. Hostettler, K. A. McDougall, and L. B. Magoon. 2002. *Subsurface and Petroleum Geology of the Southwestern Santa Clara Valley ("Silicon Valley")*, *California*. (Professional Paper 1663) Washington, DC: U. S. Government Printing Office.

4.12 NOISE

The following analysis is based, in part, on a Noise Assessment prepared by *Illingworth & Rodkin* in March 2014. The report can be found in Appendix F of this Initial Study.

4.12.1 Setting

4.12.1.1 Background Information

Acceptable levels of noise vary from land use to land use. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and Federal standards have been established as guidelines for determining the compatibility of a particular land use with its noise environment.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_{01} , L_{10} , L_{50} , and L_{90} , are commonly used. They are the A-weighted noise levels equaled or exceeded during 1, 10, 50, and 90 percent of a stated time period.

Sound level meters can accurately measure environmental noise levels to within about plus or minus one dBA. Since the sensitivity to noise increases during the evening hours, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Day/Night Average Sound Level, Ldn*, is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 decibels (dB) to noise levels measured in the nighttime between 10:00 PM and 7:00 AM. Alternatively, instead of *Ldn*, the *Community Noise Equivalent Level (CNEL)* can be used to measure the cumulative noise exposure in a community with a five dB penalty added to the evening (7:00 PM to 10:00 PM) and a 10 dB addition to nocturnal (10:00 PM to 7:00 AM) noise levels.

The most widespread and continual source of noise in Santa Clara is transportation and transportation-related facilities. Freeways, local arterials, the Norman Y. Mineta San José International Airport, railroads, and Light Rail Transit are all major contributors to noise in Santa

²⁸ The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. All sound levels in this discussion are A-weighted, unless otherwise stated.

Clara. In the project area, the main sources of noise are vehicular traffic on Winchester Boulevard and residential neighborhood traffic on Jill Avenue and Fernwood Avenue.

4.12.1.2 Regulatory Background – Noise

The State of California and the City of Santa Clara have established guidelines, regulations, and policies designed to limit noise exposure at noise sensitive land uses. Appendix E of the State CEQA Guidelines, the State of California Building Code, and the City of Santa Clara's Noise Element of the General Plan present the following applicable criteria:

State CEQA Guidelines. The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects resulting from a proposed project. These guidelines have been used in this Initial Study as thresholds for establishing potentially significant noise impacts and are listed under *Thresholds of Significance*.

City of Santa Clara General Plan. Based on the City's General Plan Noise Element, Table 4.12-1 shows the noise levels considered compatible with specific land uses, the community noise equivalent level (CNEL). Residential land uses are considered compatible with Ldn noise levels of up to 55 dBA and acceptable with design and insulation techniques in areas with Ldn noise levels up to 70 dBA.

			TABI	LE 4.12-1							
Noise and Land Use Compatibility (Ldn & CNEL)											
Land Use	50	55	60	65	70	75	80	85			
Residential											
Educational			1								
Recreational											
Commercial											
Industrial											
Open Space											
	Compatib										
	•		nsulation to								
	Incompati	ble. Avoid	land use exc	cept when e	ntirely indo	ors and an	interior noi	ise level			
	of 45 L _{dn} of	can be mair	ntained								
Source: City of	Santa Clara	2010-2035	General Pl	an							

City of Santa Clara General Plan Noise Policies. The following General Plan policies are applicable to the proposed project:

• *Policy 5.10.6-G1:* Noise sources restricted to minimize impacts in the community.

- *Policy 5.10.6-G2:* Sensitive uses protected from noise intrusion.
- *Policy 5.10.6-P1:* Review all land use and development proposals for consistency with the General Plan compatibility standards and acceptable noise exposure levels defined on Table 5.10-1.
- *Policy 5.10.6-P2:* Incorporate noise attenuation measures for all projects that have noise exposure levels greater than General Plan "normally acceptable" levels, as defined on Table 5.10-1.
- *Policy 5.10.6-P3:* New development should include noise control techniques to reduce noise to acceptable levels, including site layout (setbacks, separation and shielding), building treatments (mechanical ventilation system, sound-rated windows, solid core doors and baffling) and structural measures (earthen berms and sound walls).
- *Policy 5.10.6-P5:* Require noise-generating uses near residential neighborhoods to include solid walls and heavy landscaping along common property lines, and to place compressors and mechanical equipment in sound-proof enclosures.

City of Santa Clara Noise Standards. Section 5.10.6 of the General Plan states that all indoor uses are compatible at less than 45 dB CNEL and that exterior noise must be attenuated to achieve a normally acceptable interior noise level of 45 dB CNEL for noise sensitive land uses and 50 dB CNEL for office, retail, and other indoor spaces.

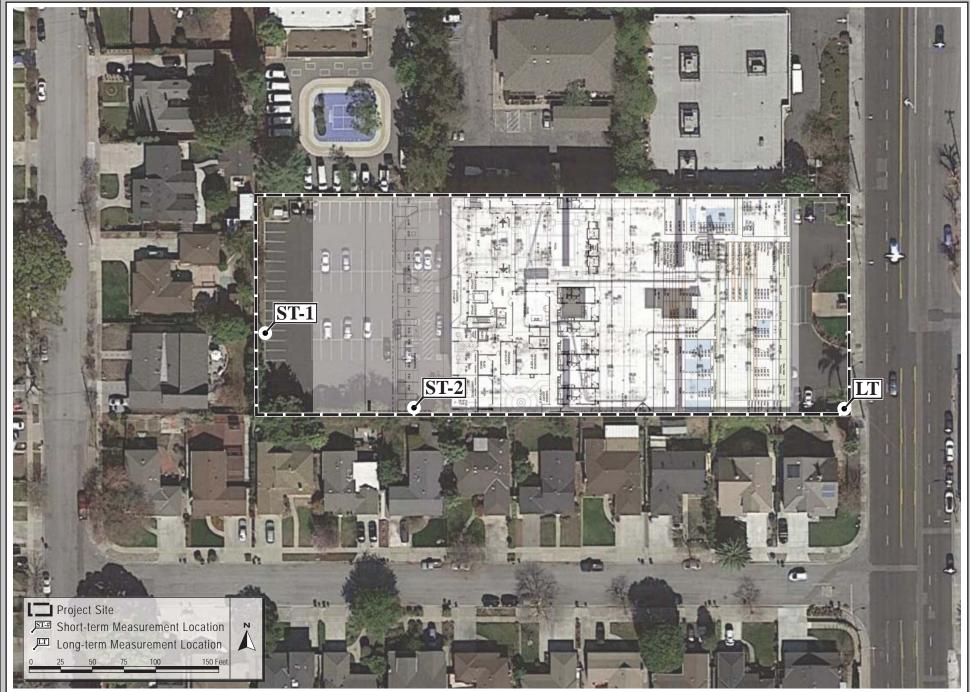
Santa Clara City Code. In section 9.10.040 of the Santa Clara City Code, Schedule A shows the noise levels considered consistent with specific zoning designations. For residential land uses, outdoor noise levels of up to 55 dB are considered acceptable between 7:00 AM and 10:00 PM and up to 50 dB between 10:00 PM and 7:00 AM.

4.12.1.3 Existing Noise Environment

A noise monitoring survey was completed to determine the existing ambient noise levels at the project site. The noise survey recorded one-long term measurement (LT-1) and two short-term measurements (ST-1 and ST-2). Noise in the project area is generated primarily from vehicle traffic on Winchester Boulevard as well as residential neighborhood traffic on Jill Avenue (west of the site) and Fernwood Avenue (south of the site). The locations of the noise measurements are detailed below and shown on Figure 4.12-1.

Long-term noise measurement LT-1 was on the southeast corner of the project site, approximately 50 feet from the centerline of Winchester Boulevard, and near a single-family residence. The CNEL at this location was 71 dBA.

Short-term noise measurement ST-1 was located on-site in the parking lot along the western boundary of the site and near single-family residences. ST-1 was approximately 140 feet west of the



existing office building and approximately 160 feet east of the centerline of Jill Avenue. The CNEL at this location was 48 dBA.

Short-term noise measurement ST-2 was located in the parking area under the building along the southern boundary of the project site. ST-2 was approximately 390 feet west of the centerline of Winchester Boulevard. The CNEL at this location was 52 dBA.

The site is outside the projected 60 CNEL noise contours in 2017 and 2027 for the Norman Y. Mineta San José International Airport.²⁹

4.12.1.4 Sensitive Receptors

Noise sensitive land uses adjacent or within proximity to the site include the existing residential neighborhood immediately south and west of the project site as well as a special education school and an apartment complex north of the project site.

4.12.2 Environmental Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
1. Exposure of persons to or generation of n levels in excess of standards established i the local general plan or noise ordinance, applicable standards of other agencies?	n				1,2,3,17
2. Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?					1,2,3,17
3. A substantial permanent increase in ambie noise levels in the project vicinity above levels existing without the project?	ent 🗌				1,2,3,17
4. A substantial temporary or periodic increasin ambient noise levels in the project vicin above levels existing without the project?					1,2,3,17
5. For a project located within an airport land use plan or, where such a plan has not bee adopted, within two miles of a public airp or public use airport, will the project expense people residing or working in the project at to excessive noise levels?	en ort ese				1,2,3,17

²⁹ Norman Y. Mineta San José International Airport Master Plan Update Project – Eighth Addendum to the Environmental Impact Report. February 10, 2010. http://www.flysanjose.com/fl/about/improve/overview/CR_EIR_Add.pdf Accessed June 22, 2015.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
6. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?					1,2,3

4.12.2.1 Thresholds of Significance

The CEQA Guidelines state that a project would normally be considered to have a significant impact if noise levels conflict with adopted environmental standards or plans, or if noise levels generated by the project would substantially increase existing noise levels at noise-sensitive receivers on a permanent or temporary basis. CEQA does not define what noise level increase would be substantial. The General Plan defines a change of three dBA L_{dn} as noticeable and five dBA L_{dn} as distinct in noise level. Typically, project-generated noise level increases of three dBA L_{dn} or greater are considered significant where resulting exterior noise levels would exceed the normally acceptable noise level standard. Where noise levels would remain at or below the normally acceptable noise level standard with the project, a noise level increase of five dBA L_{dn} or greater is considered significant.

4.12.2.2 Noise Impacts to the Project Site

Exterior Noise Levels on Outdoor Areas

The project site is located adjacent to Winchester Boulevard, and exterior noise at the project site could reach up to 71 dBA CNEL along the street frontage. The project proposes two outdoor courtyards and a pool area that would be surrounded by the apartment units. The buildings would create a noise barrier from the vehicular traffic along the roadway, thereby, reducing the exterior noise level on the outdoor areas on-site to less than 55 dBA CNEL, which is the maximum allowable compatible noise level for residential uses, according to the General Plan.

The project also includes a rooftop terrace on top of the third floor units along Winchester Boulevard which is part of the project's open space requirement. The rooftop terrace is approximately 70 feet from the centerline of Winchester Boulevard and 35 feet from the ground surface. On the terrace, the exterior ambient noise level would be up to 60 dBA CNEL, exceeding the 55 dBA CNEL for residential outdoor use areas.

Impact NOI-1: Implementation of the proposed project could expose future residents utilizing the rooftop terrace to exterior noise levels in excess of the 55 dBA CNEL threshold. (Significant Impact)

³⁰ City of Santa Clara. 2010. City of Santa Clara 2010-2035 General Plan, Section 8.14.1 Noise Measurement.

Mitigation and Avoidance Measures

General Plan Policies

The policies of the City of Santa Clara General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Development under the proposed General Plan Amendment would be subject to existing General Plan policies, including those listed below.

Policy 5.10.6-G2: Sensitive uses protected from noise intrusion.

Policy 5.10.6-P2: Incorporate noise attenuation measures for all projects that have noise exposure levels greater than General Plan "normally acceptable" levels, as defined on Table 5.10-1.

Policy 5.10.6-P3: New development should include noise control techniques to reduce noise to acceptable levels, including site layout (setbacks, separation and shielding), building treatments (mechanical ventilation system, sound-rated windows, solid core doors and baffling) and structural measures (earthen berms and sound walls).

The project will incorporate the following measures to reduce exterior noise impacts to the project site to a less than significant level.

MM NOI-1.1:

A four-foot solid wall with one foot of Plexiglas on top shall be installed around the perimeter of the roof terrace, attaching to the proposed building on both sides, to provide shielding from traffic along Winchester Boulevard. The total length of the proposed barrier would be approximately 185 feet and would be continuous from floor to top, with no cracks or gaps, and have a minimum surface density of three pounds per square feet.

With implementation of the above mitigation measure, the project would result in a less than significant exterior noise impact. (Less Than Significant Impact With Mitigation)

Interior Noise Levels

The City of Santa Clara requires that interior noise levels within new residential developments not exceed 45 dBA CNEL. Using standard construction techniques, a typical building insulation material provides 15 dBA of attenuation with windows open and 20 to 25 dBA of attenuation with windows closed. With the incorporation of a forced air mechanical ventilation system to allow windows to remain closed, interior noise levels can typically be maintained below State and City standards within exterior noise environments that range from 60 to 65 dBA CNEL, using standard construction techniques. In noise environments of 65 dBA CNEL or greater, a combination of forced-air mechanical ventilation and sound-rated construction methods is typically required to meet the 45 dBA CNEL interior noise level standard.

Based on available data, it is estimated that future residents with units adjacent to Winchester Boulevard would be exposed to exterior noise levels with a maximum of 70 dBA CNEL and an interior noise level of 50 to 55 dBA CNEL with standard construction techniques, exceeding the 45 dBA CNEL threshold.

Impact NOI-2:

Implementation of the proposed project could expose future residents near Winchester Boulevard to interior noise levels in excess of the 45 dBA CNEL threshold for City and State standards for residential development. (Significant Impact)

Mitigation and Avoidance Measures

General Plan Policies

The policies of the City of Santa Clara General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Development under the proposed General Plan Amendment would be subject to existing General Plan policies, including those listed below.

Policy 5.10.6-G1: Noise sources restricted to minimize impacts in the community.

Policy 5.10.6-G2: Sensitive uses protected from noise intrusion.

- Policy 5.10.6-P2: Incorporate noise attenuation measures for all projects that have noise exposure levels greater than General Plan "normally acceptable" levels, as defined on Table 5.10-1.
- Policy 5.10.6-P3: New development should include noise control techniques to reduce noise to acceptable levels, including site layout (setbacks, separation and shielding), building treatments (mechanical ventilation system, sound-rated windows, solid core doors and baffling) and structural measures (earthen berms and sound walls).
- Policy 5.10.6-P5: Require noise-generating uses near residential neighborhoods to include solid walls and heavy landscaping along common property lines, and to place compressors and mechanical equipment in sound-proof enclosures.

The project will incorporate the following measures to reduce interior noise impacts at the project site to a less than significant level.

MM NOI-2.1:

A qualified acoustical consultant shall review the final site plan including building elevations and floor plans prior to construction to calculate expected interior noise levels on a unit-by-unit basis. Project-specific acoustical analyses are required by the California Building Code and the City Code to confirm that the design results in interior noise levels reduced to 45 dBA CNEL. The proposed units along Winchester Boulevard, as well as exterior-facing units

along the north and south sides of the proposed apartment complex, would require analysis for potential sound-rated construction methods and building facade treatments to maintain interior noise levels at or below acceptable levels. These treatments would include, but are not limited to, sound rated windows and doors, sound rated wall constructions, acoustical caulking, protected ventilation openings, etc. From the building floor plans and elevations provided at the time of this analysis, the units with direct line-of-sight to Winchester Boulevard would require windows and doors with a minimum Sound Transmission Class (STC)³¹ rating of 26 to 31. The specific determination of what noise insulation treatments are necessary shall be conducted on a unit-by-unit basis during final design of the project. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City, along with the building plans and approved design, prior to issuance of a building permit.

Building sound insulation requirements would need to include the
provision of forced-air mechanical ventilation for all perimeter apartment
units within 250 feet of Winchester Boulevard, so that windows could be
kept closed at the occupant's discretion to control noise.

With implementation of the above mitigation measures, the project would result in a less than significant interior noise impact. (Less Than Significant Impact With Mitigation)

4.12.2.3 Project-Generated Traffic Noise Impacts

Based upon the traffic estimates for the project, traffic noise levels would not increase as a result of the project. A noise increase is considered substantial if it increases the ambient noise level by three dB or more in sensitive noise areas. A three dB increase is equivalent to a doubling of traffic on local roadways.

Compared to the exiting office building, the project would result in a net decrease of approximately 407 daily vehicle trips from the project site. Therefore, implementation of the proposed project would result in a decrease in traffic-related noise on Winchester Boulevard and other local roadways and would result in a less than significant ambient noise level impact. (Less Than Significant Impact)

4.12.2.4 Project-Generated Mechanical Equipment Noise Impacts

The proposed project would include various mechanical equipment such as ventilation systems, air conditioning, exhaust fans, etc. The City Code limits noise levels from building equipment to 55 dBA during the daytime (7:00 am to 10:00 pm) and 50 dBA during the evening (10:00 pm to 7:00 am) at adjacent noise sensitive land uses.

³¹ Sound Transmission Class (STC) is a single figure rating designed to give an estimate of the sound insulation properties of a partition. Numerically, STC represents the number of decibels of speech sound reduction from one side of the partition to the other. The STC is intended for use when speech and office noise constitute the principal noise problem.

The mechanical equipment would be required to be designed to minimize noise impacts to the residences south, west, and north of the site, consistent with City code. Design measures could include location of the equipment and various types of mechanical screening.

Final design of the mechanical equipment would be reviewed by City staff prior to issuance of installation permits. Because the project would be required to comply with City Code standards related to mechanical equipment noise, the project would have a less than significant noise impact on nearby residences. (Less Than Significant Impact)

4.12.2.5 Construction Impacts

Construction activities associated with implementation of the proposed project would temporarily increase noise levels in the project area. Construction activities generate considerable amounts of noise, especially during demolition and construction activities. Typical average construction generated noise levels are about 81 - 88 dB measured at a distance of 50 feet from the center of the site during busy construction periods. Construction generated noise levels drop off at a rate of about six dB per doubling of distance between the source and receptor.

The construction of the proposed project, approximately 12 months, would temporarily increase noise levels in the immediate vicinity of the project site and would be audible at the nearby residences. Compliance with City Code requirements for construction (Chapter 9.10) including implementation of the following best management practices would reduce impacts from construction activities on the project site.

- Construction and demolition activities shall be limited to the period between 7:00 AM and 6:00 PM Monday through Friday and 9:00 AM to 6:00 PM on Saturdays. No construction or demolition activities are permitted on Sundays or holidays.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses. Temporary noise barriers could reduce construction noise levels by 5 dBA.
- Construction crews will be required to use available noise suppression devices and properly
 maintain and muffle internal combustion engine-driven construction equipment.
- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noisegenerating construction activities. The construction plan shall identify a procedure for

coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.

The applicant shall designate a disturbance coordinator and post the name and phone number of
this person at easy reference points for the surrounding land uses. The disturbance coordinator
shall respond to and address all complaints about noise.

Compliance with City Code requirements during construction activities on the project site and implementation of the above standard best management practices would result in a less than significant construction noise impact. (Less Than Significant Impact)

4.12.2.6 Other Noise Impacts

The project site is located 1.8 miles from the Mineta San José International Airport and is outside of the airports projected noise contours for 2017 and 2027. Therefore, the project would have no noise impact related to airport operations. (**No Impact**)

The project site is not in proximity to a private airstrip and would have no noise-related impacts due to private aircraft operations. (**No Impact**)

4.12.3 Conclusion

Compliance with City Code requirements and identified standard best management practices would reduce temporary construction noise impacts to a less than significant level. (Less Than Significant Impact)

Conformance with General Plan policies and implementation of the identified mitigation measures would reduce long-term noise impacts to future residents of the site to a less than significant level. (Less Than Significant Impact With Mitigation)

The proposed project would have a less than significant long-term noise impact on nearby sensitive receptors. (Less Than Significant Impact)

The project site is located outside the Mineta San Jose International Airport's noise contours and would have no noise impact related to public airport operations. (**No Impact**)

The project site is not in proximity to a private airstrip and would have no noise-related impacts due to private aircraft operations. (**No Impact**)

4.13 POPULATION AND HOUSING

4.13.1 Setting

As of 2013, the City of Santa Clara had a total population 120,245 residents.³² In 2012, there were 12,034 households with an average of 2.7 persons per household.³³ According to the City's General Plan, the projected population in 2035 will be 154,825 residents, 60,435 households, 154,280 total jobs and 86,800 employed residents.

The jobs/housing balance is the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. This relationship is quantified by the jobs/employed resident ratio. When the ratio reaches 1.0, a balance is struck between the supply of local housing and local jobs. The jobs/employed resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. This is an environmental issue because proximity between jobs and housing strongly influences driving patterns, air quality, and other environmental factors.

The City of Santa Clara had an estimated 1.9 jobs per employed resident in 2008. The 2010-2035 General Plan focuses on increased housing and the placement of housing near employment. As a result, the overall jobs/employed residents ratio is expected to decrease to 1.77 by 2035.

4.13.2 <u>Environmental Checklist and Discussion of Impacts</u>

		Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wo	ould the project:					
1.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?					1,2,3
2.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?					1,2,3
3.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?					1,2,3

United States Census Bureau. State and County QuickFacts.
 http://quickfacts.census.gov/qfd/states/06/0669084.html (April 22, 2015). Accessed May 18, 2015.
 Ibid.

4.13.2.1 Population and Housing Impacts

Implementation of the project would demolish an existing office building and construct two residential buildings totaling 92 housing units. The proposed housing units would be age restricted to senior citizens approximately 55 years of age or older. Based on the average household size in the City of Santa Clara, the 92 housing units would conservatively result in a net increase of 248 residents. Because the proposed residences are for seniors, some residents will be retired out of the workforce. Therefore, the increase in housing would not have the same effect on the jobs/housing imbalance as a standard housing project. The project would, however, help the City achieve the overall goal of increasing housing supply.

Implementation of the proposed project would remove an office building and would not require replacement housing to be constructed.³⁵ (**Less than Significant Impact**)

4.13.3 Conclusion

Implementation of the proposed project will result in a less than significant impact on the City's population and housing supply. (Less Than Significant Impact)

³⁴ Due to the age restriction, the number of residents would be less than 248.

³⁵ The project site and on-site residence is currently owned and occupied by the project applicant.

4.14 PUBLIC SERVICES

4.14.1 Setting

The proposed project would develop two residential buildings with up to 92 housing units for residents 55 years of age or older. The typical public services that would be utilized by these residents include police and fire protection, libraries, parks, and senior centers.

4.14.1.1 Police Protection Services

Police protection services are provided in the project area by the City of Santa Clara Police Department (SCPD). The SCPD is divided into three divisions, Field Operations, Investigations, and Administrative Services, and has approximately 145 sworn officers, 23 reserve officers, and 41 support personnel.³⁶ Police headquarters is located at 601 El Camino Real, approximately 1.8 miles northeast of the project site.

4.14.1.2 Fire Protection Services

Fire protection services are provided to the project site by the City of Santa Clara Fire Department (SCFD). The SCFD is comprised of approximately 180 fire service personnel and over 60 reserve employees/volunteers. ³⁷ The SCFD receives an average of 7,000 emergency calls per year, including hazardous materials, emergency medical, specialized rescue, and fires. ³⁸ The goal of the SCFD is to maintain a force sufficiently staffed and deployed to sustain a three-minute response time to initial calls 90-95 percent of the time. ³⁹

The SCFD consists of 10 stations distributed throughout the City. The nearest station to the project site is Station Four, located at 2323 Pruneridge Avenue, which is approximately 0.54 miles northwest of the project site.

4.14.1.3 Libraries

The City is served by three libraries, the Central Park Library located at 2635 Homestead Road, and the Mission Library Family Reading Center located at 1098 Lexington Street, and Northside Branch Library (opened 2014) in Live Oak Park. The Central Park Library includes group study rooms, large community rooms, public art, more than 100 public computers, high speed Internet connection for personal laptops, a computer training facility, a café and bookstore, a renowned genealogy and local history collection, a children's garden, and an extensive collection of materials for educational and recreational use. The Mission Library contains an extensive collection of reading materials and is headquarters for READ Santa Clara, a free adult literacy program.

³⁶ City of Santa Clara Website: http://scpd.org/index.aspx?page=1521 Accessed April 16, 2015.

³⁷ City of Santa Clara Website. Fire Department Administration. Fact Sheet. 2009.

http://santaclaraca.gov/index.aspx?page=326> Updated May 2011. Accessed April 16, 2015.

³⁸ City of Santa Clara Website. Fire Department About Us. http://santaclaraca.gov/index.aspx?page=294> Accessed May 18, 2015.

³⁹ City of Santa Clara Website. Emergency Services. http://santaclaraca.gov/index.aspx?page=1063 Accessed May 18, 2015.

4.14.1.4 Community Centers

Due to the age demographics of the future residents on-site, the residents could use the Santa Clara Senior Center (located at 1303 Fremont Street) which provides programs and services for seniors 50 years of age or older. The center includes a swimming pool, woodshop, fitness center, and activity rooms (i.e., ping pong, bingo, arts and crafts, ballroom dancing, music, health and wellness, and other programs).⁴⁰

4.14.1.5 Parks

The City of Santa Clara Parks and Recreation Department currently maintains one 45-acre community park (Central Park), 25 neighborhood parks (approximately 123 acres), five mini parks (approximately 2.6 acres), and a wildlife and natural vegetation park. Mini parks are typically less than one acre in size and neighborhood parks range from one to fifteen acres in size.

The nearest City park is Thomas Barret Park at Midtown Village located at 1885 Worthington Circle, approximately 0.1 miles south of the project site. Thomas Barrett Park at Midtown Village is a one-acre park that contains a lawn area, picnic area, a children's play area, and restrooms.⁴¹

4.14.1.6 Schools

The project site is located within the Campbell Union School District (CUSD) and Campbell Union High School District (CUHSD) and would be served by the following schools listed in Table 4.14-1.

TABLE 4.14-1 Local Schools					
School	Location				
Lynhaven Elementary School	881 S. Cypress Avenue, San Jose				
Monroe Middle School	1055 S. Monroe Street, San Jose				
Del Mar High School	1224 Del Mar Avenue, San Jose				

Based on the CUSD student generation rates, residential development generates approximately 0.4 elementary students per unit and 0.1 junior high students per unit.⁴² Based on CUHSD student generation rates, residential development generates 0.08 high school students per unit rate for multifamily residential development.⁴³

⁴⁰ City of Santa Clara Website. Santa Clara Senior Center. http://santaclaraca.gov/index.aspx?page=243 Accessed May 18, 2015.

⁴¹ City of Santa Clara Website. Parks. http://santaclaraca.gov/index.aspx?page=2654&recordid=1406> Accessed May 18, 2015.

⁴² Shelley Wedel. Student Information Department. Campbell Union School District. Personal Communication. September 4, 2014.

⁴³ Toni Selzler. Business Services Secretary. Campbell Union High School District. Personal Communications. September 4, 2014.

4.14.1.5 Regulatory Framework

Parkland Dedication Ordinance

On July 15, 2014, the City of Santa Clara adopted the Parkland Dedication Ordinance (PDO, City Code Chapter 17.35) requiring new residential development to either dedicate sufficient land to serve new residents, or pay fees to offset the increased costs of providing new park facilities for new development. The ordinance intended to reduce the extent to which new development would exacerbate the existing park and recreational facilities. A project must provide park and recreational facilities per Chapter 17.35 of the City Code. The City may determine, at its discretion, that a combination of land dedication and the remaining fee in lieu of land dedication may be required. A credit for private open space can be requested from the City. Dedication of land and payment of any remaining fees due in lieu of land dedication minus a maximum credit of 50 percent of the land devoted to eligible on-site parkland recreational elements represents the mitigation for parkland impacts.

4.14.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection? Police Protection?					1,2,3 1,2,3 1,2,3
	Schools? Parks? Other Public Facilities?					1,2,3 1,2,3 1,2,3

4.14.2.1 Impacts to Public Services

Police Protection Services

The proposed residential development would increase the population of Santa Clara and would incrementally increase the demand for police services because the project would increase the number of residents on-site. The project site is, however, located within an urban area that is already served by the SCPD. The project would be constructed in conformance with current codes, and the project design would be reviewed by the SCPD to ensure that it incorporates appropriate safety features to

minimize criminal activity. New facilities would not be required to provide adequate police services to serve the proposed project. (Less Than Significant Impact)

Fire Protection Services

The proposed residential development would increase the population of Santa Clara and would incrementally increase the demand for fire protection services because the project would increase the number of residents on-site. The proposed project would be built to applicable Fire Code standards in use when construction permits are issued, including sprinklers and smoke detectors, and would include features that would reduce potential fire hazards. Emergency vehicles would have access to the proposed residential buildings via Winchester Boulevard and the driveway on-site.

Although the proposed project could increase demand for fire response and related emergency services, it would not require the development of new fire stations to meet City Service goals and, therefore, would not result in a significant physical impact on the environment. (**Less Than Significant Impact**)

Library Impacts

Implementation of the proposed project could increase the overall population of the City by up to 248 people.⁴⁴ Given that the proposed units would mostly be one bedroom units and are specifically designate for seniors, the projected number of residents on-site is an overestimate. Compared to the City's projected population of 154,825 residents by 2035, the addition of up to 248 new residents to the City would not result in a substantial impact to library services in the City and would not result in the need for new library facilities. (Less Than Significant Impact)

Park Impacts

The proposed project would increase the number of residents on-site. Therefore, the demand on parks and other recreational facilities in the project area would increase. The project, however, includes on-site outdoor space and recreational facilities including a pool, a fitness room, two courtyard gardens, and a rooftop terrace. These on-site amenities would alleviate the use of nearby public parks and recreational facilities. In addition, this increase in residents represents a fraction of the total population and would not result in the accelerated deterioration or overuse of existing facilities. No new recreational facilities would need to be built to adequately serve the City's residents, and the incremental increase in park use resulting from the project will not generate the need for new park facilities beyond those identified in the City's 2010-2035 General Plan. In addition, the development will be subject to the *Santa Clara City Code Title 17*, *Chapter 17.35*, which requires the dedication of land and/or payment of a parkland fee for each new dwelling unit constructed. Parkland fees are used primarily for the acquisition and/or expansion of parks and recreational facilities. (Less Than Significant Impact)

⁴⁴ The City of Santa Clara General Plan assumes that new residential units would average 2.7 persons per household.

School Impacts

As noted above, the project site is located within the CUSD and CUHSD. Implementation of the proposed project would increase the local senior resident population. While the project is for senior residents, it is possible that a small portion of the residents may have or be guardian to school age children. As a result, the project could cause a small increase in demand on local school facilities.

Based on student generation rates for CUSH, a standard (non-age restricted) multi-family residence would generate up to 37 new elementary, nine middle school, and seven high school students. It is estimated that the proposed project could generate up to 27 new students (approximately 50 percent of the standard student generation). This would equate to approximately 18 elementary school, five middle school, and 4 high school students. Based on this estimate, the project result in the need for construction of any new school facilities or expansion of the existing schools to serve the new student population.

According to California Government Code Section 66000, a qualified agency, such as a local school district, may impose fees on developers to compensate for the impact that a project will have on existing facilities and services. The California Legislature passed Senate Bill 50 (SB 50) in 1998 to insert new language into the Government Code (Sections 65995.5-65885.7), which authorized school districts to impose fees on developers of new residential construction in excess of mitigation fees authorized by Government Code Section 66000. SB 50 also restricts the ability of local agencies to deny project approvals on the basis that public school facilities are inadequate. School districts must meet a list of specific criteria, including the completion and annual update of a School Facility Needs Analysis, in order to impose additional fees.

Under SB 50, school districts may collect fees to offset the costs associated with increasing school capacity as a result of development. Under the terms of this statute, payment of statutory fees by property owners or property developers is deemed to mitigate in full for the purposes of CEQA any impacts to school facilities associated with a qualifying project. The fees are assessed based upon the proposed square footage of the new or expanded development. The payment of school impact fees, consistent with SB 50, will allow the local school district to provide sufficient services for students generated by the project. (Less Than Significant Impact)

4.14.3 Conclusion

The project would result in no impacts to the student capacity of the schools in the City of Santa Clara. (Less Than Significant Impact)

The project would not result in significant impacts to public services in the City of Santa Clara or require the construction of new facilities to serve the resident population of the City. (**Less Than Significant Impact**)

4.15 RECREATION

4.15.1 Setting

The City of Santa Clara Parks and Recreation Department currently maintains one community park (Central Park), 25 neighborhood parks (approximately 123 acres), five mini parks (approximately 2.6 acres), and a wildlife and natural vegetation park. Mini parks are typically less than one acre in size, and neighborhood parks range from one to 15 acres in size. Central Park is 45 acres and contains several of the City's recreational facilities (listed below).

In addition to parklands, the City has a community recreation center, three swim centers, a gymnastics center, a bicycle track, a dog park, a golf and tennis club, a senior center, a teen center, a youth activity center, and a skate park. Neighborhood parks typically range in size from one acre to 10 acres. The City's Parks and Recreational system is augmented by local school facilities, which are available to the general public after normal school hours.⁴⁵

The nearest City park is Thomas Barrett Park at Midtown Village located at 1885 Worthington Circle, approximately 0.1 miles south of the project site. Thomas Barrett Park at Midtown Village is a one-acre park that contains a lawn area, picnic area, a children's play area, and restrooms.⁴⁶

4.15.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1.	Would the project increase the use of existing			\boxtimes		1,2,3
	neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?					
2.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?					1,2,3

4.15.2.1 Recreational Impacts

The proposed project would demolish an existing office building and construct two residential buildings with up to 92 housing units on-site. As a result, the demand on parks and other recreational facilities in the project area would increase. This increase, however, represents a fraction of the total population and will not result in the accelerated deterioration or overuse of these facilities. Per City Code (Chapter 17.35), for subdivisions containing more than fifty parcels, condominium developments of more than fifty dwelling units, and residential developments not including a

⁴⁵ City of Santa Clara, City of Santa Clara General Plan 2010-2035.

⁴⁶ City of Santa Clara Website. Parks. http://santaclaraca.gov/index.aspx?page=2654&recordid=1406 Accessed May 18, 2015.

subdivision, developers are required dedicate parkland, pay in-lieu fees, or a combination of both to comply with the City's Parkland Dedication Ordinance. The project proposes 92 residential units onsite, and the development will be dedicating parkland and/or paying a parkland fee to the City for potential future parkland acquisition or rehabilitation. The project proposes a recreational pool area, two communal garden areas, and a rooftop terrace for outdoor spaces on-site. A fitness room and clubhouse would be located next to the pool area. Residents would use the recreational facilities onsite, which would help to alleviate impacts to public parks and other recreational facilities in the City. The incremental increase in park use resulting from the project would not generate the need for new park facilities beyond those identified in the City's 2010-2035 General Plan. (Less Than Significant Impact)

4.15.3 <u>Conclusion</u>

The proposed project would not result in significant impacts to parks and recreational facilities in Santa Clara. (Less Than Significant Impact)

4.16 TRANSPORTATION

4.16.1 Setting

4.16.1.1 Roadway Network

The project site is located on the west side of Winchester Boulevard just south of Pruneridge Avenue/West Hedding Street. Winchester Boulevard is a five-lane roadway including a center turning lane. The roadway extends north to Homestead Road where it becomes Lincoln Street and south to Blossom Hill Road where it becomes North Santa Cruz Avenue.

Regional access to the project site is provided via San Tomas Expressway and Highway Interstate 880. San Tomas Expressway extends from Highway U.S. 101 in Santa Clara to CA-17 in Campbell. The six-lane roadway provides access to the project site via Pruneridge Avenue, Stevens Creek Boulevard, and Winchester Boulevard.

Interstate 880 is a six-lane highway that extends Highway 80 in Oakland to CA-17 in San José. The interstate provides access to the project site via Stevens Creek Boulevard and Winchester Boulevard.

4.16.1.2 Existing Pedestrian and Bicycle Facilities

Pedestrian facilities in the project area consist primarily of sidewalks on Winchester Boulevard, Pruneridge Boulevard, and nearby streets in the surrounding residential neighborhood. Crosswalks are provided at all nearby signalized intersections.

Although there are no designated bike lanes in the project area, bicycles are permitted on Pruneridge Avenue, Stevens Creek Boulevard, and Winchester Boulevard.⁴⁷

4.16.1.3 Existing Transit Service

Existing transit service on the surrounding roadways is provided by Santa Clara Valley Transportation Authority (VTA). Commuter rail service is provided by Caltrain, the Altamont Commuter Express (ACE), and the Capitol Corridor. VTA provides connection service to the Santa Clara Transit Center/Caltrain Station and the Diridon Station in San José, both of which serve the City of Santa Clara and the project area as multimodal rail stations.

The nearest bus stops, approximately 0.25 miles from the project site, are located near the Pruneridge Avenue/Winchester Boulevard and Forest Avenue/Winchester Boulevard intersections. Bus route 60 provides services between the Old Ironsides light rail station near Great America in Santa Clara and the Winchester light rail station in Campbell with 10-minute headways during commute hours.

Santana Terrace Senior Apartments City of Santa Clara

⁴⁷ City of Santa Clara Website.Bicycle Map. http://santaclaraca.gov/Modules/ShowDocument.aspx?documentid=1326 Accessed May 18, 2015.

4.16.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Wo	ould the project:			_		
1.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?					1,2,3,18
2.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?					1,2,3,18
3.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?					1,2,3
4.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?					1,2,3
5.6.	Result in inadequate emergency access? Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?					1,2,3 1,2,3

4.16.2.1 Transportation Impacts

The Santa Clara Valley Transportation Agency Congestion Management Program (CMP) calls for a transportation analysis to be prepared when a project would add 100 or more peak hour trips to the roadway network. Projects that generate fewer than 100 AM or PM peak hour trips are presumed to have a less than significant impact on the level of service (LOS) of local intersections that would carry project traffic.

Traffic trips generated by the proposed project were estimated using the "Senior Housing (attached units)" rates in the Institute of Transportation Engineers (ITE) *Trip Generation*, 9th *Edition*. Trip

credits were applied to the proposed project to account for the existing use of the site. A summary of the net project trip generation estimates is shown in Table 4.16-1, below.

TABLE 4.16-1 Trip Generation Estimates								
and Har	Daily	AM Peak Hour Pi			PM P	M Peak Hour		
Land Use	Trips	In	Out	Total	In	Out	Total	
Existing: Office Building (59,000 sf) (ITE Code 710)	717	89	12	101	16	81	97	
Proposed: Senior Adult Housing (ITE Code 252)	310	6	12	18	12	11	23	
Net Trips	-407	-83	0	-83	-4	-70	-74	
* Based on attached senior housing weekday rates.								

Based on the ITE Trip Generation Manual, the proposed project would generate approximately 310 daily trips. Of the 310 trips, 18 would occur in the AM Peak Hour and 23 would occur in the PM Peak Hour. Without the trip credit for the existing land use, the peak hour trips associated with the proposed project are below the CMP threshold of 100 trips in each peak hour. Including the trip credit, the project would result no new net trips to the site and therefore, the project would have a less than significant impact on the LOS of local intersections. (Less Than Significant Impact)

4.16.2.2 Airport Operations

The proposed project is located approximately 1.8 miles southwest of the Norman Y. Mineta San José International Airport and is outside of the Airport Influence Area. Therefore, the project would not result in a change in air traffic patterns or obstruct airport operations. (**No Impact**)

4.16.2.3 Site Design

The proposed site plan has adequate parking stalls (a minimum of eight feet wide and 16 feet long) and a driveway aisle (26 feet wide) to allow vehicles to enter and exit. The project will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses. (Less Than Significant Impact)

4.16.2.4 Emergency Access

As designed, the proposed project provides emergency vehicle access to all areas of the project site. Emergency vehicles can access the proposed residential units near the eastern boundary from Winchester Boulevard and the remaining units from the driveway aisle within the parking lot. The project would not impede on existing emergency vehicle movement on Winchester Boulevard. As a result, the project will have a less than significant impact on emergency access. (Less Than Significant Impact)

4.16.2.5 Public Transportation, Pedestrian, and Bicycle Facilities Impacts

The proposed project would not preclude the installation of planned public transportation, pedestrian, and bicycle facilities nor interfere with the operation of existing or proposed public transportation,

pedestrian, and bicycle facilities in the project area. Therefore, the proposed project would not create a significant impact. (Less Than Significant Impact)

4.16.3 <u>Conclusion</u>

Implementation of the proposed project will have a less than significant impact on local traffic operations, transportation facilities, airport operations, and emergency vehicle access. (**Less Than Significant Impact**)

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Setting

4.17.1.1 Water Services

Water is provided to the site by the City of Santa Clara Water Utility. The system consists of more than 295 miles of water mains, 27 wells, and seven storage tanks with more than 27 million gallons of water capacity. Drinking water is provided by an extensive underground aquifer (accessed by the City's wells) and by two wholesale water importers: the Santa Clara Valley Water District (SCVWD) (imported from the Sacramento-San Joaquin Delta) and the San Francisco Hetch-Hetchy System (imported from the Sierra Nevada). The three sources are used interchangeably or are blended together. A water recharge program administered by SCVWD from local reservoirs and imported Sacramento-San Joaquin Delta water enhances the dependability of the underground aquifer.

Existing Site Conditions

The office building on-site uses approximately 963 gallons of water per day.⁴⁸ Based on the City's 2010 Urban Water Management Plan, the project site is supplied by the City's well water.⁴⁹

Recycled Water

There are no recycled water lines near the project site. The nearest recycled water lines are in Los Padres Boulevard and Dolores Avenue, north of the project site.⁵⁰

4.17.1.2 Wastewater Services

The City of Santa Clara Departments of Public Works and Water and Sewer Utilities are responsible for the wastewater collection system within the City. Wastewater is collected by sewer systems in Santa Clara and is conveyed by pipelines to the San José/Santa Clara Regional Wastewater Facility (Facility) located in San José. The Facility is one of the largest advanced wastewater treatment facilities in California and serves over 1,500,000 people in San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno. The Facility has available capacity to treat up to 167 million gallons per day (mgd) and presently operates at an average dry weather flow of 109 mgd, which is 58 mgd (35 percent) under its 167 mgd treatment capacity. Approximately 10 percent of the Facility's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.

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⁴⁸ Average daily water use over 12 months from June 2014 to May 2015 based on the existing office building's water utility bill statements.

⁴⁹ City of Santa Clara. 2010 Urban Water Management Plan. Source of Water by Area. May 24, 2011. Page 5.

⁵⁰ City of Santa Clara. Recycled Water System Map. <www.santaclaraca.gov/index.aspx?page=2091> Accessed July 13, 2015.

⁵¹ City of San José, Environmental Services Division. http://www.sanjoseca.gov/esd/ Accessed July 22, 2015.

⁵² City of Santa Clara. 2010. City of Santa Clara 2010-2035 General Plan.

Existing Site Conditions

With landscaping limited to the atrium and the perimeter of the project site, it is assumed that landscape irrigation is equal to approximately 15 percent of the total potable water use on-site and the remainder (85 percent) is potable water that is assumed to exit the site as wastewater. Based on this assumption, the project site currently generates approximately 819 gallons of wastewater per day. Wastewater from the project site is discharged into an eight-inch sanitary sewer line located in Winchester Boulevard.

4.17.1.3 Storm Drainage

Runoff from the project site flows into the City of Santa Clara municipal storm drainage system. There is an existing 24-inch storm drain line in Winchester Boulevard that serves the project site.

4.17.1.4 Solid Waste

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste System through a contract with the City. Mission Trail Waste System also has a contract to implement the Clean Green portion of the City's recycling plan by collecting yard waste. All other recycling services are provided through Stevens Creek Disposal and Recycling. The City has an arrangement with the owners of the Newby Island Landfill, located in San José, to provide disposal capacity for the City of Santa Clara through 2024. The City of San José approved the expansion of Newby Island Landfill in August 2012 and could continue to provide disposal capacity to Santa Clara beyond 2024. Prior to 2024, the City would need to amend their contract with Newby Island or contract with another landfill operator which would be subject to environmental review.

The California Integrated Waste Management Board (CIWMB) established a diversion requirement of 50 percent beginning in 2000. Based on the CIWMB 2008 Annual Report Summary, the City of Santa Clara has exceeded its diversion goal. In addition to the CIWMB requirements, the City of Santa Clara has a construction debris diversion ordinance which requires all projects over 5,000 sf to divert a minimum 50 percent of construction and demolition debris from landfills.

Existing Site Conditions

The existing office building generates approximately 390 pounds of solid waste per day.⁵³

⁵³California Integrated Waste Management Board. <u>Estimated Solid Waste Generation Rates for Commercial Developments</u>. April 1992. < http://www.calrecycle.ca.gov/wastechar/wastegenrates/Commercial.htm> Accessed July 13, 2015. The solid waste generation rate for an office is estimated at six pounds per 1000 sf per day.

4.17.2 Environmental Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)		
Would the project:								
1.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?					1,2,3		
2.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					1,2,3		
3.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					1,2,3		
4.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?					1,2,3		
5.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?					1,2,3		
6.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?					1,2,3		
7.	Comply with federal, state and local statutes and regulations related to solid waste?					1,2,3		

4.17.2.1 Water Services Impacts

The proposed project would construct two residential buildings with up to 92 units totaling 137,891 sf. The project would use approximately 862 gallons of water per day, which is 101 gallons of water per day less than the existing office building, and would not exceed the capacity of the Santa Clara Water Utility to provide water services to the project site. ⁵⁴ Therefore, the project would have a less than significant impact on water supply. (Less Than Significant Impact)

⁵⁴ City of Santa Clara. 2010 Urban Water Management Plan. Table 12: Water Deliveries Projected (2015-2020). May 24, 2011. Page 20. Estimated water use is based on volume of water use (acre-feet per year) by multi-family residences in the City of Santa Clara in 2010. One acre-foot per year of water is equivalent to 893 gallons of water per day.

4.17.2.2 Wastewater Services Impacts

San José-Santa Clara Regional Wastewater Facility

The San José-Santa Clara Regional Wastewater Facility has the capacity to treat 167 mgd of wastewater. The City's average dry weather flow is 13.3 mgd based on 2009 data, while the City's allocation of treatment capacity is approximately 23 mgd. The project would generate approximately 733 gallons of wastewater per day⁵⁵ which is well below one percent of the City's total allocation of treatment capacity.⁵⁶ The proposed project would not increase the need for wastewater treatment beyond the capacity of the Facility. The project, therefore, would not have a significant wastewater services impact. (Less Than Significant Impact)

Sanitary Sewer

The proposed project would construct an eight-inch sewer line in the proposed parking aisle and driveway on-site to connect to the existing sewer line in Winchester Boulevard. The project would generate 43 gallons per day more wastewater than the existing office. The City of Santa Clara has determined that this does not represent a substantial increase and there is sufficient remaining capacity in the sanitary sewer main systems to serve the proposed development.⁵⁷ Because the proposed project would construct an adequate sewer line to serve the project site and would not exceed the capacity the City's sanitary sewer system, the project would have a less than significant impact on the sanitary sewer system. (Less Than Significant Impact)

4.17.2.3 Storm Drainage Impacts

Under existing conditions, the storm drainage system has sufficient capacity to convey runoff from the site. The proposed development would result in a one percent (1,126 sf) decrease in impervious surface area on-site. The net reduction in impervious surface area on-site would ensure that runoff from the project site would be less than existing conditions and the project would not, therefore, exceed the capacity of the local drainage system. (Less Than Significant Impact)

4.17.2.4 Solid Waste Impacts

The proposed project would generate approximately 489 pounds of solid waste per day.⁵⁸ This is 99 pounds per day more than the solid waste generated by the existing office building, which represents less than one percent of the maximum daily intake allowed at the landfill.

The Newby Island Landfill, located in San José, has an agreement with the City to provide disposal capacity through 2024. The City of San José approved the expansion of Newby Island Landfill in August 2012 and could continue to provide disposal capacity to Santa Clara beyond 2024. In

⁵⁵ Wastewater generated by the proposed project is assumed to be 85 percent of the total water demand.

⁵⁶ Based on the City's allocation of treatment capacity of 23 mgd as identified in the City of Santa Clara Draft 2010

^{– 2035} General Plan Final Environmental Impact Report. January 2011.

⁵⁷ Falguni Amin, Principal Engineer. City of Santa Clara. Email Re: Sewer Capacity. March 20, 2015.

⁵⁸ California Integrated Waste Management Board. <u>Estimated Solid Waste Generation Rates for Residential Developments</u>. January 1996. http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm Accessed July 14, 2015. Based on a multi-family unit that generates 5.31 pounds of solid waste per day.

addition, the City is working to continue meeting its waste diversion goal of 50 percent. Increased recycling will extend the useful life of the landfill. Implementation of the proposed 92-unit residential project will not result in a significant increase in solid waste and recyclable materials generated within the City of Santa Clara and will not require that new landfill facilities be contracted with or constructed to serve the proposed project. (Less Than Significant Impact)

4.17.3 <u>Conclusion</u>

The project would not result in any utility or service facility exceeding current capacity or require the construction of new infrastructure or service facilities. (Less Than Significant Impact)

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
1.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?					1-19
2.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?					1-19
3.	Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?					1-19
4.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?					1-19

4.18.1 Findings

The project would result in temporary air quality, water quality, biological (loss of bird nests), geological, and noise impacts during construction. With the implementation of identified best management practices and mitigation measures, and consistency with adopted City policies, the construction impacts would be mitigated to a less than significant level. Because the nature of the identified impacts are temporary and will be mitigated, the proposed project would not have a cumulatively considerable impact on air quality, water quality, biological resources, geology and soils, or noise in the project area due to construction activities.

The project site is not in proximity to any major sources of TACs (i.e., gas stations, industrial facilities, high traffic roadways) that could pose a risk to future residents. Therefore, implementation of the proposed project would not expose future residents of the project site to cumulatively considerable TAC and PM_{2.5} emission concentrations.

Implementation of the proposed project would result in the loss of 25 trees on-site. The trees to be removed will be replaced on-site consistent with City policy. Trees on adjacent properties will be

protected during project construction. The project will have no long-term effect on the urban forest or the availability of trees as nesting and/or foraging habitat. Therefore, the project would not have a cumulatively considerable impact on biological resources.

While there are no known subsurface resources on or adjacent to the project site, the site is located within the City of Santa Clara, a known prehistoric occupation area. Therefore, the project site has some potential for buried historic and/or prehistoric resources. Because the potential cultural resource impacts from implementation of the project would be mitigated, the proposed project would not have a cumulatively considerable impact on cultural resources in the project area.

The proposed project would not reduce emissions relative to the existing conditions on-site and would not preclude the City or State from meeting emission reduction goals by the horizon year 2020, or result in a cumulatively considerable increase in GHG emissions.

The site has localized soil contamination related to historic agricultural operations on-site as well as contamination via groundwater from nearby off-site hazardous sources. In addition, fluids from old elevator hydraulic equipment from the existing office building could contaminate the soils on-site. The identified hazardous materials impacts will be mitigated and would not result in a cumulatively considerable impact.

With the approval of a General Plan Amendment and a rezone to allow high density residential uses on-site, the project would be consistent with all applicable City land use regulations.

As discussed in the respective sections, the proposed project would have no impact or a less than significant impact on aesthetics, agriculture and forest resources, geology and soils (other than during construction identified above), mineral resources, population and housing, public services, recreation, transportation, and utility and service facilities. The project is part of the planned growth in the General Plan and the increase in dwelling units will not result in the City having substantially more housing that was planned for in the General Plan. The cumulative impacts to utilities, public services, and population and housing have been addressed in the General Plan Environmental Impact Report and accounted for in the City's long-term infrastructure service planning. The project will not have a cumulatively considerable impact on these resource areas.

There are no recently approved or reasonably foreseeable projects that, when combined with the proposed project, would result in a cumulatively considerable impact.

4.18.2 Conclusion

Implementation of the proposed project would not result in any significant unavoidable impacts, impacts that are cumulatively considerable, or directly or indirectly cause substantial adverse effects on human beings. (Less Than Significant Impact)

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Persons Consulted

No persons were consulted other than referenced consultants and City staff.

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